DOCUMENT RESUME

ED 256 942 CE 041 507

AUTHOR	Hollenback, Kathryn; And Others
TITLE	Evaluate the Effectiveness of the Occupational Orientation Programs in Texas. Final Report.
INSTITUTION	North Texas State Univ., Denton. Coll. of Education.
SPONS AGENCY	Texas Education Agency, Austin. Dept. of Occupational Education and Technology.
PUB DATE	Jun 84
NOTE	286p.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Career Awareness; *Career Education; *Career Exploration; Change Strategies; Curriculum Development; Educational Needs; Followup Studies; Junior High Schools; Literature Reviews; Needs Assessment; Pilot Projects; Program Administration; *Program Effectiveness; Program Evaluation; Questionnaires; Secondary Education; State Surveys; *Statewide Planning; Teacher Certification; *Teacher Education
IDENTIFIERS	*Texas

ABSTRACT

A project consisting of two followup studies, a literature review, and a pilot study was conducted to evaluate the occupational orientation curriculum and occupational orientation teacher education programs currently in existence in Texas and to recommend changes needed to update them. Various survey instruments were administered to participants at the 1983 State Workshop for Vocational Guidance Personnel in Austin, teachers and administrators involved in delivery of the occupational orientation curriculum at the local level, students participating in occupational orientation programs (both before and after they completed the curriculum), and local education agencies that had previously conducted their own evaluations of local occupational orientation programs. Personal testimony and individual success stories relating to the value of the occupational orientation curriculum abounded, thus supporting the conclusion that Texas should be proud of its occupational orientation program. However, the program was not found to be without problems. Several problems in the areas of curriculum development, teacher certification, program management, and evaluation were noted, and recommendations to address these problems were formulated. (This report consists of six independent sections detailing the various phases of the study and presenting the six questionnaires administered during the project.) (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED256942

FINAL REPORT

Evaluate the Effectiveness of the Occupational Orientation Programs in Texas

A Project Funded by:

The Texas Education Agency
Department of Occupational Education and Technology

In Cooperation with:

North Texas State University
College of Education

Conducted by:

Kathryn Hollenback, Ph.D.	Co-Director
James R. Miller, Ph.D.	Co-Director
Kathleen Bresnahan-Lopez	Research Assistant

CE041507

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

JUNE, 1984

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

D Bristow

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TABLE OF CONTENTS

Page

LIST OF TABLES v

INTRODUCTION 1

General Description of the Project

Purpose of the Project

Objectives of the Project

Procedures

Format of the Report

PART I: REVIEW OF THE LITERATURE 5

Introduction

Problem of the Study

Statement of the Purpose

Research Questions

Review of the Literature

Dissertations on Occupational Orientation

Texas Education Agency Sponsored Studies on Occupational Orientation
Local Education Agency Research, Evaluation and Follow-Up

Summary

Recommendations

PART II: EVALUATION OF OCCUPATIONAL ORIENTATION CURRICULUM 28

Introduction

Problem of the Study

Statement of the Purpose

Research Questions

Instrumentation

Curriculum Questionnaire

Needs Assessment Questionnaire

Data Analysis

Demographic Section: Profile of the Respondents

Curriculum Content Section: Data Establishing Priority for Occupational Orientation Student-Learner Outcomes

Self Appraisal
Educational Planning and Decision Making
Socioeconomic Factors
Fifteen Clusters

Page

- Curriculum Review Section: Occupational Orientation Respondents' Comments
    - Self Appraisal
    - Educational Planning and Decision Making
    - Socioeconomic Factors
    - Fifteen Clusters
- Need Assessment
- Project Advisory Committee Recommendations for Curriculum Development

- Summary
- Recommendations

PART III: EVALUATION OF TEACHER EDUCATION 73

- Introduction
- Statement of the Purpose
- Research Questions
- Instrumentation
- Data Analysis
    - Profile of the Respondents
    - Respondents' Perceived Usefulness of Certification Courses
    - Respondents' Evaluations of Certification Courses
    - Respondents' Evaluations of the Occupational Orientation Teacher Certification Delivery System
    - Respondents' Suggestions for Improving Occupational Orientation Teacher Certification Courses
- Summary
- Recommendations

PART IV: EVALUATION OF OCCUPATIONAL ORIENTATION UNITS 107

- Introduction
- Problem of the Study
- The Purpose of the Study
- Research Questions
- Instrumentation
    - Evaluation of Occupational Orientation Programs
    - Evaluation of Occupational Orientation Students
- Data Analysis for Local Program Evaluation
    - Profile of Respondents
    - Experience of Occupational Orientation Teachers

BEST COPY AVAILABLE

    - Instructional Charateristics of Occupational Orientation Units
    - Occupational Orientation Student Populations
    - Perceived Purpose of Occupational Orientation
- Occupational Orientation Program Survey
    - Evaluation Section
    - Internal Problems
    - External Problems
- Data Analysis for Student Evaluation
    - Profile of Respondents
    - Description of Participating Schools
- Summary
    - Quantitative Data
    - Qualitative Data
- Recommendations

PART V: PROJECT SUMMARY 171

- Introduction
- Local Occupational Orientation Units
- Curriculum Development
- Teacher Certification
- Program Management
- Program Evaluation
- Recommendations
    - Curriculum
    - Teacher Certification
    - Program Management
    - Evaluation
- Conclusion

PART VI: APPENDICES AND BIBLIOGRAPHY 196

- Appendix A: Project Advisory Committee Information
- Appendix B: Questionnaires
- Appendix C: Local Education Agency Evaluation Surveys
- Appendix D: Additional Data
- Bibliography

LIST OF TABLES

Table Page

IA-B. Responses to White Settlement ISD Follow-Up Study of Occupational Investigation 17

II. Enrollment of Occupational Exploration Students in Skill-Training Programs at Greenville ISD 19

III. Responses to Commerce ISD Evaluation of Occupational Investigation 20

IV. Occupational Orientation Teaching Experience of the Curriculum Survey Respondents 33

V. Teaching Area of Curriculum Survey Respondents 33

VI. Certification Status of Curriculum Survey Respondents 34

VII. Self Appraisal Objectives Ranked by Means and Compared to 1980 Ranking 35

VIII. Educational Planning and Decision Making Objectives Ranked by Means and Compared to 1980 Ranking 37

IX. Social Aspects of Socioeconomic Objectives Ranked by Means and Compared to 1980 Ranking 39

X. Economic Aspects of Socioeconomic Objectives Ranked by Means and Compared to 1980 Ranking 41

XI. Fifteen Clusters Objectives Ranked by Means and Compared to 1980 Ranking 44

XII. One-Way Analysis of Variance for Instructional Area Enabling Objectives 46

XIII. Occupational Orientation Respondents' Comments on the Individual Self Appraisal Instructional Area Objectives 47

XIV. Occupational Orientation Respondents' Comments on the Individual Educational Planning and Decision Making Instructional Area Objectives 50

XV. Occupational Orientation Respondents' Comments on the Individual Social Aspects of Socioeconomic Factors Instructional Area Objectives 53

XVI. Occupational Orientation Respondents' Comments on the Individual Economic Aspects of Socioeconomic Factors Instructional Area Objectives . . . . 5[illegible]

Table Page

XVII. Occupational Orientation Respondents' Comments on the Individual Fifteen Clusters Instructional Area Objectives 63

XVIII. Individual Area and Over-All Listing of Need Assessment Items Ranked by Mean Differences 67

XIX. Sex of Teacher Education Survey Respondents 76

XX. Ethnicity of Teacher Education Survey Respondents 77

XXI. Teaching Position of Teacher Education Survey Respondents 77

XXII. Length of Time Occupational Orientation Program Has Existed in Respondents' School District 78

XXIII. Respondents' Experience Teaching Occupational Orientation 78

XXIV. Location of Respondents Certification Work 79

XXV. Comparison of 1980 and 1983 Responses to Question Two: To What Extent Has Each Course Been Useful to You in the Area of Planning and Organizing Your Classes? 80

XXVI. Significant Differences Between Groups for Questions Two and Three 81

XXVII. Comparison of 1980 and 1983 Responses to Question Three: To What Extent Has Each Course Been Useful to You in Day to Day Operation of Your Classes? 82

XXVIII. Comparison of 1980 and 1983 Responses to Question Four: To What Extent Was the Textbook for Each Course Relevant? 82

XXIX. Significant Differences Between Groups for Questions Four through Ten 83

XXX. Comparison of 1980 and 1983 Responses to Question Five: To What Extent Was the Course Content of These Courses Relevant? 84

XXXI. Comparison of 1980 and 1983 Responses to Question Six: To What Extent Was the Course Content of These Courses Well-Organized? 84

XXXII. Comparison of 1980 and 1983 Responses to Question Seven: To What Extent Were the Objectives of Each Course Made Clear? . . 85

XXXIII. Comparison of 1980 and 1983 Responses to Question Eight: To What Extent Was the Course Content of Each Course Current? . . 86

XXXIV. Comparison of 1980 and 1983 Responses to Question Nine: To What Extent Were the Instructional Materials and/or Resources of Each Course Appropriate? 86

Table Page

XXXV. How Would You Rate the Value of This Course in Relation to the Other Certification Courses that You Have Completed? 87

XXXVI. Comparison of 1980 and 1983 Respondents' Perceived Needs for Additional Courses to Prepare Occupational Orientation Teachers 88

XXXVII. Problems in Becoming a Certified Occupational Orientation Teacher 89

XXXVIII. Possible Improvements to Strengthen the Certification Program . . . 89

XXXIX. Teachers' Perceptions of the Roles and Duties of Occupational Orientation Teacher Educators 90

XL. Question Three: How Much Specific Instruction Related to Occupational Orientation Did You Receive from Your Certification Courses in the Following Topics? 91

XLI. Suggestions from Teachers Who Have Not Completed All Certification Courses for Certification Course Improvement . . 91

XLII. Suggestions from Teachers Who Have Completed All Certification Courses for Certification Course Improvement 94

XLIII. Occupational Investigation Program Data Reported by Individual Local Education Agencies 111

XLIV. Occupational Exploration Program Data Reported by Individual Local Education Agencies 120

XLV. Experience of Occupational Orientation Teachers for 1983-1984 School Year . . . . . 1[illegible]

XLVI. Length of Occupational Exploration Classes in Minutes 122

XLVII. Frequency and Percentage Scores for Number of Periods a Day for Occupational Investigation and Occupational Exploration Units 123

XLVIII. Length of Course Frequency and Percentage Scores for Occupational Investigation and Occupational Exploration 124

XLIX. Career Areas Covered by Individual Occupational Exploration Programs 125

L. Frequencies and Percentages for Districts Completing Research, Evaluations or Follow-Up on Their Occupational Orientation Programs 126

LI. Special Populations Served by Local Occupational Orientation Programs 127

Table Page

LII. Responses To: "What Do You Perceive as the Purpose of Occupational Investigation in the District?" by Rank Order 128

LIII. Responses To: "What Do You Perceive as the Purpose of Occupational Exploration in the District?" 131

LIV. Frequency and Percent of Professionals Responding to the Occupational Orientation Program Survey 132

LV. Means, Frequencies and Percentages of Teachers and Counselor Responses to the Confidential Survey 133

LVI. Means, Frequencies and Percentages of Other Administrator Responses to the Confidential Survey 133

LVII. Means, Frequencies and Percentages of Vocational Administrator Responses to the Confidential Survey 134

LVIII. Responses from Teachers and Counselors on the Confidential Evaluation Survey 137

LVIIIa. Responses from Administrators on the Confidential Evaluation Survey 142

LVIIIb. Responses from Vocational Administrators on the Confidential Survey 143

LIX. Number of Pretest/Posttest and Posttest Only Participants by Individual School 155

LX. Results of a t-Test for Independent Samples to Determine Possible Testing Bias 155

LXI. Results of the t-Test for Component Tests of the CMI for Schools A, B, C, and E 157

LXII. Pre/Posttest Average Mean Differences in Percentile Scores for Individual Schools 157

LXIII. Results of the t-Test for Component Tests of the CMI for School A 159

LXIV. Results of the t-Text for Component Tests of the CMI for School B 160

LXV. Results of the t-Test for Component Tests of the CMI for School C 160

LXVI. Results of the t-Test for Component Test of the CMI for School D 161

LXVII. Results of the t-Test for Component Tests of the CMI for School E 162

BEST COPY AVAILABLE

Introduction

The term Occupational Orientation refers to the vocational program in the State of Texas that has two distinct phases. The first phase, occupational investigation, is a course designed for general career investigation activities at the junior high/middle school level. (This is the primary population. In 1979 the suggested program standards approved units to be offered at the high school level. Because the first units approved were funded from exemplary funds there are a few units for adult learners.) Occupational exploration is the second phase. It is offered at the high school level and is designed to offer career exploratory experiences for one or more specific career areas within one of the fifteen career clusters.

Occupational Orientation began during the initial career education movement of the early seventies. The original ten pilot programs were funded for the 1970-1971 school year. Its primary thrust in both phases was occupational information and self awareness. However, since its beginning the program has evolved to reflect more of a vocational education philosophy. Much more emphasis is currently being placed on job acquisition, educational planning, and decision-making skills. It has become an integral part of the comprehensive vocational guidance system in Texas.

General Description of the Project

In April of 1983, the Research Coordinating Unit, Department of Occupational Education and Technology, Texas Education Agency issued Request for Proposal--R10 (17, p. 13) to evaluate the effectiveness of the Occupational Orientation Program. This Project is the result of that Request for Proposal. It consists of two follow-up studies, a literature review and a pilot study.

Purpose of the Project

The purpose of the Project as stated in the original RFP was as follows: "To evaluate the Occupational Orientation curriculum and Occupational Orientation teacher education and recommend changes for update, as needed" (17, p. 13).

Objectives of the Project

Three objectives were originally stated in the Request for Proposal. However, during initial contract negotiations between Texas Education Agency personnel and the Project's staff, a fourth objective was added to fulfill the Agency's need for a pilot study of Occupational Orientation students. The Project was then undertaken to meet the following four objectives:

1. To review revision and tentative projection of Occupational Orientation curriculum to reflect status change and project curriculum for possible future needs.
2. To determine preservice and inservice training needs of Occupational Orientation personnel and other staff to update and improve the quality of Occupational Orientation programs to better serve special populations.
3. To determine appropriate activities, instruction, and materials for professional development which accommodate ongoing technological development as perceived by Occupational Orientation teachers.
4. To review research, evaluation, and follow-up studies on Occupational Orientation in Texas and complete a pilot study to evaluate students' perceptions of Occupational Orientation programs.

Procedures

To meet the Project's objectives, the following procedures were taken during the course of the Project.

* * *

A negotiation session took place between Research Coordinating Unit personnel, the Director of East Texas State University's Occupational Curriculum Laboratory and the Project's staff. The purpose of the meeting was to modify the objectives and results of the proposal as originally submitted and to establish procedures for working with East Texas State University's Occupational Curriculum Laboratory personnel. This was necessary due to the similarity between this Project and the curriculum development project, "Curriculum Development-Occupational Orientation--C08" (17, p. 52) completed by the Occupational Curriculum Laboratory.

* * *

A Joint Project Advisory Committee was established. The Committee was made up of business and industry representatives, teacher educators for Occupational Orientation, occupational investigation teachers, occupational exploration teachers, Texas Education Agency Occupational Education personnel, Project staff members and Project staff representatives from the Occupational Curriculum Laboratory staff. (See Appendix A.)

* * *

Three questionnaires used in previous evaluations of Occupational Orientation curriculum, instructional needs, and teacher education were modified and reprinted for replication of the original research and evaluation. (See Appendix B.) The modified questionnaires were administered to Occupational Orientation teachers at the 1983 State Workshop for Vocational Guidance Personnel in Austin, Texas on July 31 through August 3, 1983.

* * *

The data from the curriculum questionnaires were analyzed to determine the validity of existing terminal performance objectives and enabling objectives for occupational investigation. The need assessment data were analyzed to determine curriculum needs in the areas of classroom management, instructional materials and references for writing curriculum.

* * *

The two sets of data from the curriculum questionnaires were presented to Occupational Curriculum Laboratory personnel. A meeting was held to examine the data and recommendations were made by the Project staff. The findings, conclusions, and recommendations were put into report form.

* * *

A fourth set of questionnaires designed to ascertain the demographic variables of individual Occupational Orientation units at the local level were developed, administered and analyzed. (See Appendix B.) The instruments identified the variables that must be taken into consideration when evaluating local Occupational Orientation programs. They provided a complete description of Occupational Orientation programs at the local level.

* * *

Copies of the Career Maturity Inventory (CMI) by John O. Crites were distributed to the occupational investigation and occupational exploration teachers on the Project Advisory Committee in order to complete a pilot study. The teachers administered the tests to their students in a pretest/posttest-only design. The test was used to determine the effects occupational investigation and occupational exploration had on the variable career maturity. Based on the findings, recommendations were made for a complete state-wide evaluation of Occupational Orientation students.

* * *

Local education agencies that had completed follow-up, research or evaluation of their individual programs were contacted and copies of their studies were obtained. These, plus other research studies completed on Occupational Orientation in Texas were reviewed. Based on the findings of these studies, conclusions and recommendations were made.

* * *

The final procedure was the compilation of a comprehensive report for submission to the Research Coordinating Unit, Department of Occupational Education and Technology, Texas Education Agency.

Format of the Report

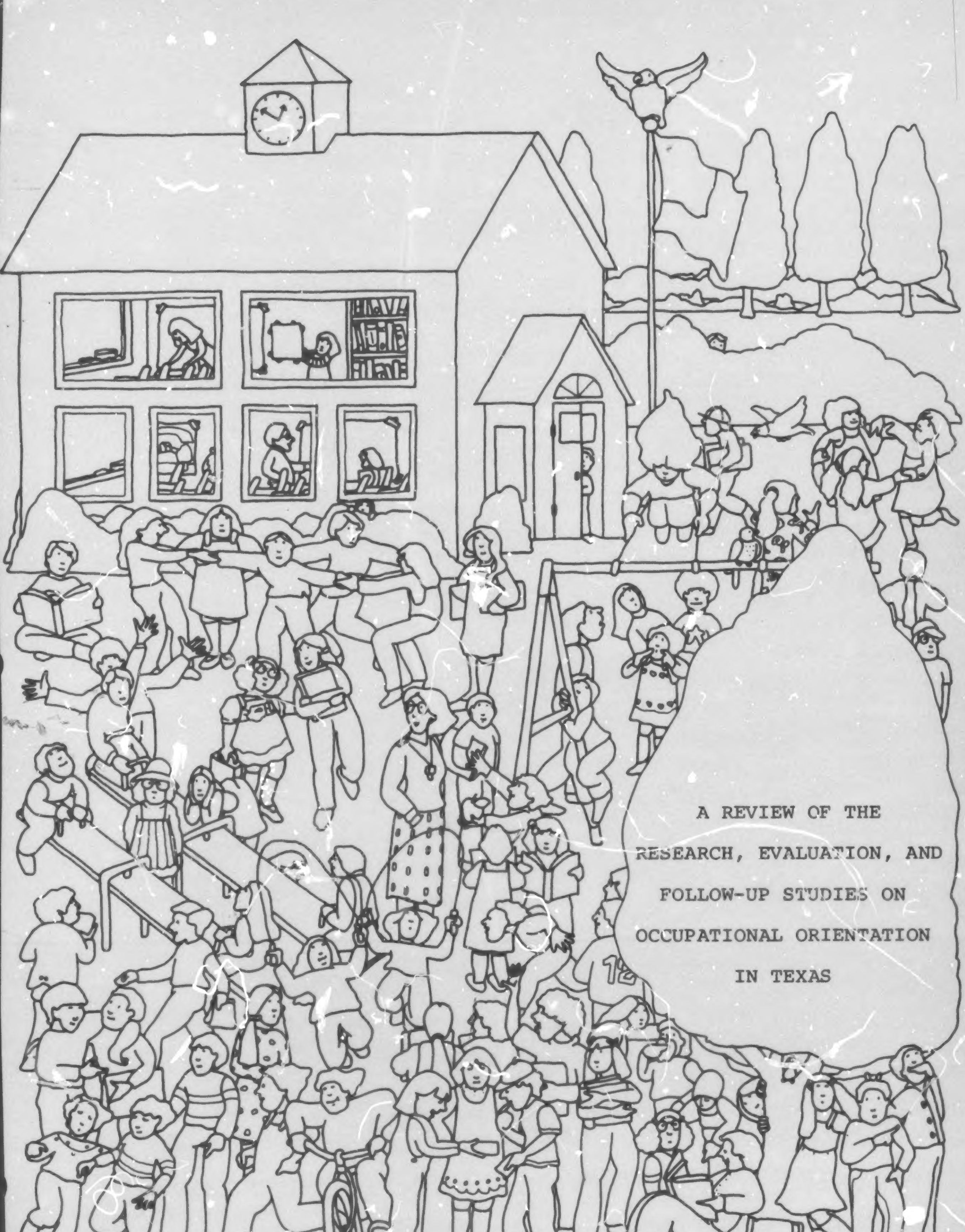
In order to make the information and data of this multi-faceted report as accessible as possible, the report has been divided into six sections as follows:

1. Review of the Literature;
2. Evaluation of Occupational Orientation Curriculum;
3. Evaluation of Occupational Orientation Teacher Education;
4. Evaluation of Occupational Orientation Programs at the local level;
5. Project Summary;
6. Bibliography and Appendices.

Each research section is complete in itself. All data gathered for each research area are reported, as are the data analyses, findings, conclusions and bibliographies.

The final Summary section summarizes the entire study. The Summary should prove to be beneficial for presenting the major results of the Project's research to groups, administrators, etc.

I. REVIEW OF THE LITERATURE



A REVIEW OF THE RESEARCH, EVALUATION, AND FOLLOW-UP STUDIES ON OCCUPATIONAL ORIENTATION IN TEXAS

PART I

Introduction

A survey of the literature on the effectiveness of Occupational Orientation Programs in Texas revealed that most investigations came from three sources--graduate schools, the Research Coordinating Unit of the Texas Education Agency and local education agencies. Most of the activities have been devoted to the occupational investigation phase of Occupational Orientation, although a few have been directed at the occupational exploration phase.

In an effort to establish a framework for adequately investigating various studies in the area of effectiveness of Occupational Orientation Programs, this section will include summaries of the literature from the three sources. The first will cover dissertations completed on the topic. The second will review previous studies of Occupational Orientation supported by research grants through the Texas Education Agency. The last portion will report the findings from research, evaluations and follow-up activities accomplished by individual local education agencies.

Problem of the Study

Although a single state-wide study has never been done to establish the effectiveness of Occupational Orientation programs, many studies have made a determination of the effectiveness of various components of Occupational Orientation programs. The problem of this study was to review all known research in the State, directly or indirectly, related to the topic of Occupational Orientation Program effectiveness.

Purpose of the Study

The purpose of this research was to review and summarize all known research, evaluations, and follow-up studies that measured the effectiveness of Occupational Orientation Programs. The findings were used to draw conclusions and make recommendations for Occupational Orientation Program research and development.

Research Questions

1. Is there evidence that Occupational Orientation is a beneficial experience for students?

2. Has previous research identified any weakness in Occupational Orientation?

3. What problems, if any, have been encountered in completing research on Occupational Orientation?

4. What are the major findings, conclusions and recommendations from previous research?

Dissertations on Occupational Orientation

The literature review produced only one dissertation devoted to the occupational exploration phase of Occupational Orientation. Authored by Bearden (2), the purpose was to evaluate by race, the effectiveness of one-year and two-year occupational exploration courses on facilitating the career maturity of ninth-grade male students.

Three groups of students from the Greenville I.S.D. were used: eighty-eight males enrolled in a ninth grade construction industries occupational exploration class, twenty-nine males enrolled in an occupational exploration class who had also completed an occupational investigation class in the eighth grade and sixty-seven ninth-grade males who had not taken either class of occupational orientation. These three groups represented the entire male population of the ninth-grade class with the exception of special education students. To measure any changes in career maturity, the Career Maturity Inventory (a complete description of this instrument is located on page 109) was used in a pre/posttest design.

Based on the findings, Bearden concluded that Occupational Orientation courses did not materially affect the career maturity of ninth-grade male students in Greenville I.S.D.

"Apparently students in the white control group significantly outperformed the students in all experimental groups with the exception of the white students in the two-year Occupational Orientation course. However, the black students in the control group outperformed the white students in the one-year exploration course" (p. 71). The self appraisal ability of white students who took two years of Occupational Orientation as compared to black students was significantly improved. Based on data obtained in this study, Bearden found that the planning ability of white students having had one year of occupational orientation and black students having had two years of Occupational Orientation "appeared to have deteriorated" (p. 80).

Another conclusion based on subjective observations is that industrial arts teachers do not have the expertise needed, without additional course work in career orientation, to fuse the career information in with shop activities" (p. 80).

At the time this research was submitted, there were four dissertations completed on occupational investigation classes in Texas. These studies measured the effect of completing an occupational investigation class on various variables including career maturity, self esteem, and work attitudes. The first was completed in 1974, just four years after the program had been implemented. The latest was defended in 1981. Since that time no additional studies have been completed.

In 1974, Barnes (1) measured the effects of occupational investigation on ninth-grade students. The purpose of the research was to determine the effects of a one- and two-semester occupational investigation course using the Career Maturity Inventory. Using a total of ten schools, six treatment schools were matched with four control schools on the basis of size of ninth-grade class, ethnic composition and geographic location.

Barnes found a significant gain in scores of the two-semester occupational investigation students over the one-semester occupational investigation students in five of the six sections of the Career Maturity Inventory (Problem Solving was the exception). There was also a significant increase in the mean scores in all sections of the Competence Test for students having completed one semester of occupational investigation versus the matched pairs control group students who had not taken occupational investigation. There were no significant gains in the mean scores for the Attitude Scale.

When samples from predominately Mexican-American schools were compared, the mean scores of students completing two semesters of occupational investigation were higher on all six sections than the control students who had not taken occupational investigation. However, Anglo students showed no significant gain after completing the two-semester program. Barnes felt that the variation in geographic location may have affected this finding. White students in southern and more rural areas were compared to students in school districts that were suburban and located close to large metropolitan areas.

Barnes concluded that evidence indicated that the greatest effect of occupational investigation was with Mexican-American students in sociologically and economically depressed areas (57). This conclusion is reinforced by the findings of Rivas (18). She reported similar findings with Mexican-American students enrolled in CVAE classes that used some career guidance materials developed for Occupational Orientation.

Another study on the effects of an occupational investigation program on the career maturity of students was completed by Magill (14). Using a pre/post control group design, ninety-seven eighth graders who had two years of occupational investigation and thirty-eight eighth graders who had completed one year of occupational investigation in Dallas I.S.D.'s Career Academy were compared to sixty-two eighth graders who had not taken occupational investigation. One hundred and twenty seventh-grade students who had completed one year of occupational investigation were compared to fifty-one seventh graders who had not taken occupational investigation.

The Basic Objectives Assessment Test was used simultaneously with the Career Maturity Inventory for the eighth-grade students and the Iowa Test of Basic Skills was used for the seventh graders. An analysis of covariance was computed on the Career Maturity Index posttest scores of the experimental and control groups. The CMI was used as the criterion variable and scores from the Iowa Test of Basic Skills for the seventh graders and the Basic Objectives Assessment Test for eighth graders with the CMI pretest served as covariates in analyzing the CMI posttest scores.

Magill found that seventh- and eighth-grade students who had completed occupational investigation scored significantly higher on the adjusted composite CMI mean posttest scores than did seventh- and eighth-grade students in the control groups. All black students and females scored significantly higher on the adjusted composite CMI mean posttest scores than blacks and females in the control group. Males in the experimental group scored higher, but not significantly so.

There were two major conclusions based on the findings: (1) "The Occupational Investigation program at the Pearl C. Anderson Career Academy was an effective program for increasing the career maturity of seventh- and eighth-grade students as indicated by the results of the Career Maturity Inventory" (p. 142), and (2) "The Occupational Investigation program at the Pearl C. Anderson Career Academy was an effective program for increasing the everyday skills of eighth-grade students who had one or two years of Occupational Investigation as measured by the Basic Objectives Assessment Test" (p. 143).

In an unpublished study, Mokaramane (16) compared the maturity of work attitudes of eighth-grade students. Approximately thirty students enrolled in the twelfth week of an occupational investigation class and thirty students enrolled in band at Northwest I.S.D. completed the Attitude Survey of the Career Maturity Inventory.

It was assumed that the band students would be higher academically and would score higher on the Attitude Scale. However, the average scores were virtually the same. The mean score for the occupational investigation students was 29.63.

The band students scored 30.37. The median for the occupational investigation students was 31.0, one point higher than the band students.

Without pretest scores it is difficult to reach any conclusions about the effectiveness of occupational investigation. However, if the assumption were valid that the band students, because of academic ability, should have scored higher and were a different population, then the occupational investigation class may have had an effect on the experimental group.

Witherspoon (23) studied occupational investigation programs in Texas based on the perceptions of graduating seniors. He compared 106 Denison High School seniors who had completed an occupational investigation class when in eighth grade and 87 Trinity High School seniors (Hurst-Euless-Bedford I.S.D.) who had not enrolled in an occupational investigation class. The two groups were similar regarding sex distribution, enrollment in vocational and industrial arts/crafts, grade averages (student reported) and post-secondary training plans.

The comparisons between the groups were based on six variables: goal setting ability, attitude toward world of work and dignity of labor, self-awareness, ability to identify career and occupational opportunities, ability to relate school life to work, and the ability to formulate educational plans. The data were gathered by a 150-item adaptation of the Career Education Measurement Series.

Witherspoon found that students who had completed occupational investigation showed significantly higher scores on all six variables. He concluded that the experimental group: (1) were better prepared to set goals with regard to career training, (2) displayed a more positive attitude toward the world of work and dignity of labor, (3) had a better awareness of self than those who did not, (4) were better able to identify career and occupational opportunities, (5) were better able to relate school life to work, and (6) were better able to formulate educational plans.

Lackey (12) attempted to determine if there was a significant difference in self-esteem scores, as measured by Coopersmith's Self-Esteem Inventory (3) between students in an occupational investigation course and students not in an occupational investigation course.

One hundred and three eighth graders in an occupational investigation class at Sulphur Springs Middle School made up the experimental group and 96 eighth graders enrolled in an art class at the same school were in the control group. The subjects were pretested and posttested using the Self-Esteem Inventory and Rotter's Internal-External Locus of Control Scale (19).

The treatment consisted of two instructional modules in the occupational investigation instructional areas of self appraisal and the occupational clusters. Students received instruction one hour a week for sixteen weeks. The intent of the self appraisal module "was to build students' self-esteem and aid them in becoming aware of their strengths and weaknesses" (p. 49). The activities for the occupational clusters were "to aid the students in becoming aware that their strengths, interests and hobbies could become potential career options. . . . also were designed to aid . . . in building decision-making skills" (p. 50).

Lackey found no significant differences in the self-esteem scores between the experimental and control group, although the experimental group experienced more gain in self-esteem scores. She did find a significant difference in the scores representing locus of control (Note: Locus of control refers to an individual's perceived origin of reinforcement. It is internal if the reinforcement is contingent on a person's behavior and external if luck or fate provides reinforcement following behavior; pp. 9-10.) between the two groups. The students in occupational investigation had a greater increase in internal locus of control.

Lackey concluded that "Both self-esteem and locus of control are difficult to change, and to expect significant changes may require more intensive and longer periods of treatment" (p. 79).

Texas Education Agency Sponsored Studies on Occupational Orientation

In 1973, Huffstutler et al. (10) completed an evaluative study of Occupational Orientation programs funded by the Texas Education Agency for the 1972-1973 school year. Sixty-nine "Occupational Orientation program staff members" were interviewed and students in Greenville and Fort Worth were evaluated. The students were pre/posttested to assess the degree to which student knowledge about occupations was influenced as the result of participation in Occupational Orientation programs.

The instrument selected to assess change in knowledge was the Children's Knowledge About Occupations Test. The test consists of sixteen color slides of various occupations and an accompanying questionnaire to measure students' knowledge and interest in them. To control for a testing effect, each school was randomly divided into two populations. One group was administered the knowledge test on a pretest-posttest basis over a six-month period. The second group was administered the test on a posttest basis only. However, analysis of the data found no systematic tendency for the pre/posttest group to score higher on the posttest.

Significantly higher posttest scores were evidenced by both groups on both variables (identification of occupations and identification of functions). The authors concluded: "The instruction was apparently very effective in these programs."

Based on the face-to-face interviews and student evaluations, the authors listed forty-four findings, conclusions and recommendations. Some of those are as follows (numbers from the original study were retained):

Effects on Student Learning Behavior:

7. A very high percentage of the program personnel interviewed felt that student participants did significantly change their attitude toward school (p. 69).

12. Over 75 percent of the programs did not develop a comprehensive program evaluation system. There was very little student pretesting and only 37 percent of the school systems planned to administer student posttests (p. 70).

24. There was evidence to support the conclusion that the occupational orientation programs had some impact upon students' enthusiasm for learning (p. 72).

25. The attitude of student participants toward the world of work and the dignity of labor and occupations did improve somewhat significantly during the program (p. 72).

27. There was evidence to indicate that the programs have assisted in the improvement of the process of learning more about individual student interests, abilities, aptitudes and needs. They also had some positive impact toward assisting students to explore their own abilities and interests, along with increasing their self-awareness (p. 72).

29. Occupational orientation teachers and counselors agreed rather strongly that the programs were a very positive and helpful influence upon students in the process of relating school life to work. There were also indications that the occupational orientation programs were of some value and assistance to students and counselors in the development of future educational planning and a positive influence to motivate students to stay in school and continue their education (pp. 72-73).

Teacher Education/Training and Information:

2. There was a need for the development and implementation of comprehensive inservice education programs in career education and occupational orientation programming for teachers, administrators, supervisors, and counselors (p. 69).

4. School administrators had not received adequate orientation concerning the programs prior to their being activated (p. 69).

9. The study reported that very few of the programs had developed active, working, effective advisory committees. Even though some committees were organized, they did not perform in such a manner as to have a

visible, positive effect upon the programs (p. 70).

17. There was a definite need for more defined standards and guidelines. It was recommended that guides be designed to achieve uniformity and continuity of programming with some allowances for flexibility (p. 71).

Two studies completed by Hollenback (8, 9) had as a primary purpose, curriculum development for Occupational Orientation. However, secondary objectives included the gathering of demographic data and teacher comments on individual Occupational Orientation programs. The first study completed in 1980 was undertaken to identify the subject content of occupational investigation and develop validated learning objectives.

During the first phase of the study, 115 experienced occupational investigation teachers, a figure representing 76 percent of the population, were surveyed to ascertain what was being taught in occupational investigation classes. Data gathered from the demographic section of the survey revealed the following:

1. Occupational investigation was called eight different names at the local level.
2. Experienced teachers averaged two years previous experience teaching occupational investigation. (Forty percent of the teachers were new teachers.)
3. There was an average of twenty-one students in the classes and 44 percent of the programs were required for all students in the schools.
4. Seventy-two percent of the teachers did not use advisory committees for curriculum input.
5. Sixty-three percent of the teachers agreed or strongly agreed that they were capable of developing a follow-up system for their occupational investigation students.

This study produced a validated curriculum outline to "facilitate curriculum design at the local level by providing student performance objectives that have been validated . . ." (p. 195).

The following year, a curriculum needs assessment for occupational exploration was completed (8). Although originally intended as an assessment of the needs of all 49½ units approved by the Texas Education Agency for funding during the 1980-1981 school year, the study surveyed twenty-three programs. Dallas I.S.D. declined the invitation to participate in the study.

Data were gathered through a needs assessment survey instrument. (An adaptation of this survey instrument can be found in Appendix B.) The data analysis indicated that the occupational exploration teachers did not have a perceived need for curriculum or classroom management materials and very little need for instructional materials.

The demographic data and curricula submitted by local education agencies ". . . demonstrated a great deal of diversity between the various units of occupational exploration" (p. 9). The study concluded that "units have been developed to meet the needs of students at the local level, so that there exists diversity, not only in subject matter of the different clusters, but in philosophy, organization and instruction" (p. 9).

The 1982-1983 school year witnessed the first administration of the Vocational Education Evaluation Survey questionnaires for occupational investigation and occupational exploration. Five units of occupational exploration and fifteen units of occupational investigation were evaluated by the administration of the Texas Education Agency's evaluation questionnaire. Although the final report had not been disseminated at the time of this research, the data (21, 22) was available for review.

There were several areas that were evaluated as strengths for both courses. These areas included promoting equal access and opportunity to programs and services for all males and females in program goals, instructional materials and guidance and counseling policies and materials; meeting the needs of special populations in program goals, instructional objectives and guidance and counseling policies and materials; adequacy of funding and teacher/student ratio; and use of certified teachers who attend both local and state inservice activities.

The fifteen occupational investigation units evaluated were rated 3.0 (program meets performance statements) or higher on each of four aspects in the section dealing with instructional objectives. It appears that objectives were being used with students and students were assessed by these objectives. However, both programs were rated 2.4 (2.0 = needs minor improvement to meet performance statement) or less on having the instructional objectives reviewed annually by the local advisory committees for relevancy with local labor market needs. The same was found for the program goals.

A weakness in both programs was the lack of local education agency program review by administering a follow-up survey to senior students. Students who have taken Occupational Orientation were not being asked to determine the effectiveness of their experiences in Occupational Orientation.

Other areas that needed improving for occupational exploration included clearly written and accessible instructional objectives for the course, adequate space for group and individual instruction, adequate facilities, a cumulative record of the results of occupational exploration activities, safety guards, emergency cut-off switches, and other safety features on all operating equipment and spacing of equipment.

The overall impression given by the data was a favorable one. There were some weaknesses--weaknesses that were evident in both courses. However, since the local districts that participated were not randomly selected and were few in numbers, the findings can not really be generalized to the entire State.

Local Education Agency Research, Evaluation and Follow-Up Studies

Three studies were completed by Roy Gabryl, Counselor, for the North East Independent School District in San Antonio. The first study (5), completed in 1981, used an adaptation of the Career Maturity Inventory to ". . . determine whether attitudes toward work and career choosing can be increased significantly beyond that of normal maturation through external intervention" (p. 1).

Fifty-two attitude statements were administered to the entire seventh-grade class of Nimitz Middle School in a pretest/posttest design. An analysis of the data gathered supported the following findings:

1. Forty-three percent of the students made a definite career choice in the pretest and fifty-one percent made a career choice in the posttest. The students making a career decision on the posttest had a mean score on the attitude survey reflecting a maturity development of three years over those students not making a career choice.

2. Students were asked to indicate their class schedule in both pretest and posttest. A comparison of attitude scores was made of four categories of students (enriched, regular, basic, and Special Education). The students enrolled in at least one enriched class scored an equivalent of three years in attitude development over the students in all regular classes. Students who were in at least one basic class scored an equivalent of three years less development in attitudes than those in regular classes. The Special Education students scored five years lower in development of attitudes than the regular student.

3. Though the girls had higher mean scores than the boys in both pretest and posttest, the change from pretest to posttest was greater by an equivalent of one-half year in the boys' posttest score.

4. There was no significant difference in pretest mean scores between students in Occupational Orientation classes to those students in all other electives. However, in the posttest scores, the Occupational Orientation students had a higher mean score and changed an equivalent of four years in attitude development. Students in all other electives had a change equivalent to one year in attitude development.

Based on the findings of the study, Gabryl reached the conclusion that "Students who were enrolled in an Occupational Investigation class have a significantly higher development of positive attitudes toward work and choosing careers as compared to other students in this study. The significant change in attitudes is concluded to be the result of Occupational Orientation classroom activities and experiences" (p. 9).

To meet Texas Education Agency requirements for evaluations of all approved vocational program offerings, Gabryl completed evaluations of the occupational investigation and exploration programs in the North East Independent School District (6, 7). A survey of tenth- and eleventh-grade students at Lee High School (see Appendix C) was conducted for the purpose of evaluating the effectiveness in meeting the course objectives of the occupational investigation program offered to all seventh-grade students at Nimitz Middle School. The exploration program evaluation was accumulated from surveys completed by occupational exploration students at the end of the school years, personal interviews with the teacher and informal observations.

Gabryl concluded that the survey results for occupational investigation were generally positive and complimentary of the course content and instructional services provided. The major findings indicated that a majority of students (81 percent) were aware of the course objectives and students reported they received adequate instruction in the study of occupations and in the planning for their successful entry into the world of work. Fifty-four percent of the students felt that the course should remain a required course at the middle school level. A considerable number of students reported developing mature personal and work values that Gabryl reported would carry over in their academic studies and social involvements.

He recommended increased emphasis on four occupational investigation areas: (1) Decision-making skill development; (2) In-depth career investigation; (3) Accommodations for the more academically qualified students; and (4) Additional effort in high school curriculum.

Gabryl found the results of the occupational exploration survey (see Appendix C) to be generally positive regarding both the course and the instructor. However, one of the major findings was that the majority of students did not see the course as a career exploratory program but as a shop class or more specifically as industrial arts (p. 3). This was attributed, not to failure on the teacher's part, but to the fact that students "came into the program with a mind set and generally viewed this program as industrial arts or woodworking."

The recommendations were to increase time spent in decision-making involving further training and career direction with a specific relationship to the various careers in the construction trade cluster.

In 1982 White Settlement I.S.D. (15) completed a study entitled "Four Year Follow-Up Survey for Occupational Orientation Investigation." Approximately 120 graduating high school seniors were asked to respond to a series of questions designed to evaluate their occupational investigation training. Table IA contains the data reported.

Of the seventeen instructional areas evaluated, fourteen were rated above 50 percent on the "positive" side of the scale (either yes or some). The two highest rated areas were closely related. Both dealt with job acquisition skills. Seventy-three percent of the students responded "yes" or "some" on learning how to look for a job and 72 percent answered the same for learning the necessary skills in applying and interviewing for a job. Recognizing the importance of goal setting was another instructional area rated high.

The three instructional areas falling below 50 percent were learning to make a tentative career choice, to use standard job reference materials and helping them make high school course selections. (It should be noted that high school course selection fell below 50 percent by 1.09 percent.)

The final question asked the students if they felt the course should be required for all eighth graders. Fifty percent responded "yes" and 13.33 responded "some." Twenty-one percent responded they did not feel it should be required.

The same instrument with modifications [illegible] the responses was administered to seniors in the Spring of 1984. The modifications made it difficult to compare the new data presented in Table IB. However, the new data presented a favorable evaluation of the program much as the original study did.

The new data showed six of the seventeen questions having less than 50 percent of the responses in the "strongly agree" or "agree" categories as compared with three in the original survey. Again, the strongest areas were learning how to look, applying and interviewing for jobs.

Each year, Arthur Jernigan, Vocational Director for Greenville Independent School District follows the progress of the eighth-grade occupational investigation students through the vocational programs at the high school. The information was acquired through an interview (11).

Each year approximately 70.0 percent of the students enrolling in the Construction Industries Occupational Exploration program had taken occupational investigation. Eighty-five percent of the students enrolled in the Occupational

TABLE IA

RESPONSES TO WHITE SETTLEMENT I.S.D. 1982 FOLLOW-UP STUDY OF OCCUPATIONAL INVESTIGATION

No.	Question	Yes	Some	Slightly	Not at All
	DID OCCUPATIONAL INVESTIGATION:				
3.	Help you develop a positive attitude toward yourself?	26.59%	41.48%	23.40%	8.51%
4.	Improve your ability to get along with others?	21.27	40.42	23.40	19.96
5.	Help you in recognizing your abilities and limitations?	23.40	42.55	20.21	13.82
6.	Help you relate your interests, values, and aptitudes to career choice?	30.85	38.29	15.95	14.89
7.	Make you aware of how to look for a job?	46.81	26.60	21.28	6.38
8.	Help you learn necessary skills in applying and interviewing for a job?	46.24	25.81	21.51	10.75
9.	Help you recognize personal traits that contribute to being successful on the job?	25.53	42.55	20.21	11.70
10.	Help you understand the basic principles of our economic system?	12.76	37.23	30.85	19.14
11.	Make you aware of career areas not previously considered?	37.23	29.78	25.53	11.70
12.	Help you recognize job responsibilities of various occupations?	32.25	21.18	24.73	13.97
13.	Help you make a tentative career choice?	13.97	27.95	35.48	23.65
14.	Help you learn to use standard job reference materials (Occupational Outlook Handbook, Dictionary of Occupational Titles, etc.)?	21.97	20.88	31.86	25.27
15.	Help you understand the steps in decision making?	17.02	35.11	30.85	15.96

TABLE IA--Continued

No.	Question	Yes	Some	Slightly	Not at All
16.	Help you recognize the importance of goal setting?	41.94%	20.43%	19.35%	7.52%
17.	Was a helpful program in preparing you for high school?	31.86	30.76	26.37	13.19
18.	Help you in your school course selections?	17.39	31.52	25.00	31.52
19.	As a high school senior, do you feel Occupational Orientation Investigation should be required for all eighth graders?	50.00	13.33	15.56	21.11

TABLE IB

RESPONSES TO WHITE SETTLEMENT I.S.D. 1984 FOLLOW-UP
STUDY OF OCCUPATIONAL INVESTIGATION

Number	Strongly Agree 5	Agree 4	No Opinion 3	Disagree 2	Strongly Disagree 1
3*	5.15%	35.05%	49.48%	8.24%	2.06%
4	4.12	45.36	39.17	10.30	1.03
5	12.37	52.57	22.68	8.24	4.12
6	18.56	44.33	23.71	11.34	2.06
7	23.71	50.51	17.53	5.15	3.09
8	27.83	46.39	18.56	4.12	3.09
9	11.34	44.33	35.05	7.21	2.06
10	4.12	35.05	39.18	13.40	8.25
11	10.41	45.83	30.21	8.33	5.21
12	15.96	44.68	26.60	10.64	2.13
13	9.18	35.71	38.78	10.20	6.12
14	7.53	45.16	31.18	11.83	4.30
15	9.41	38.82	45.88	12.94	4.71
16	12.50	44.32	29.55	12.50	1.14
17	8.33	28.21	42.71	13.54	7.29
18	7.37	31.57	36.84	14.74	9.47
19	23.16	32.63	25.26	11.58	7.37

*Numbers correspond to previous table questions.

Exploration Program go into a skill training program in the tenth or eleventh grade.

Table II contains the 1983-1984 enrollment numbers for the individual skills trades courses offered at Greenville Independent School District. The two laboratories most closely aligned with the curriculum content of the "Construction Industries Occupational Exploration" program showed the highest occupational exploration enrollments. Building trades had an occupational exploration completer enrollment of 95.5 percent and metal trades had an enrollment of 95.7 percent students who had taken occupational exploration. Jernigan attributed the low occupational exploration completer enrollment in electronics to the need for higher math abilities which many occupational exploration students did not have.

TABLE II

ENROLLMENT OF OCCUPATIONAL EXPLORATION STUDENTS IN SKILL-TRAINING PROGRAMS AT GREENVILLE I.S.D.

Vocational Laboratory	O.E. Completers		No O.E.		Total Enrolled
	F	%	F	%	
Auto Mechanics	25	89.3	3	10.7	28
Auto Paint and Body	22	88.0	3	12.0	25
Air Conditioning	18	81.8	4	18.2	22
Building Trades	21	95.5	1	4.5	22
Metal Trades	22	95.7	1	4.3	23
Electronics	15	57.6	11	42.4	26

Jernigan's observations of students who had taken occupational exploration and then enrolled in additional vocational classes have led to the following conclusions.

1. The students make better decisions in regards to what vocational program to take.
2. They are prone to remain in the vocational laboratories and not drop them.
3. They are more mature in both application and safety, demonstrating more experience in both areas.
4. The Construction Industries Occupational Exploration program is serving the purpose for which Greenville Independent School District desired--helping students make occupational training choices.

In 1983, Nancy Laws (13), occupational investigation teacher for Commerce I.S.D. developed and administered an instrument to evaluate her occupational investigation program. The instrument was completed by all students in December, 1983 who were completing an occupational investigation course. Table III contains the data gathered from the survey instrument.

The overall impression of these data is an extremely favorable one. Students responded to four questions 100 percent as "yes." Only 11 percent did not know what the goals of the class were and only 14 percent responded that they did not have a better understanding of the "Working World." Twenty-three percent of the students responded that they did not know what kind of training was required for the career they were considering.

Ninety-seven percent of the students answered affirmatively that their teacher explained assignments so that they understood. This, plus the positive responses to the other "activities" or instructional strategies questions, may be the reason for the overall favorability of this evaluation.

TABLE III

RESPONSES TO COMMERCE I.S.D. EVALUATION OF OCCUPATIONAL INVESTIGATION

Number	Question	Yes	No
I.	Do you know what main goals for Occupational Investigation (Career Education) are?	89%	11%
	Do you think these goals are appropriate for girls and boys?	100	0
II.	Do field trips allow you to visit a wide variety of business in our community?	97	3
	Do you think the speakers we have had have been informative and professional?	100	0
	Have the occupational films you have seen been informative?	91	9
	Are you held accountable for the information obtained from field trips, speakers and films?	100	0
	Does your teacher explain assignments so that you understand them?	97	3
III.	Is your classroom large enough to comfortably carry on classroom activities such as group discussion, cutting and pasting from magazines and newspapers, etc.?	94	6

Number	Question	Yes	No
IV.	Do you think the books in the Career Education library were helpful?	*	*
	Is there a wide variety of career related material available in the classroom?	89	11
	After taking Career Education are you more aware of jobs that you might be interested in--in the future?	86	14
	Do you understand better your likes and dislikes, and abilities and values, and how they relate to your career choices?	100	0
	Do you think you have a better understanding of the "Working World"?	86	14
	Do you know what kind of training is required for the career that you are considering?	77	23
	Do you understand what the 15 career clusters are?	94	6

*Original figures not legible.

Summary

In reviewing the studies that used the Career Maturity Inventory, two factors must be taken into consideration when accepting the validity of the findings. The CMI has a sixth-grade reading level--unfortunately, a reading level difficult for many seventh and eighth graders enrolled in Occupational Orientation programs. This is especially true when many schools place a large number of disadvantaged and handicapped students in the classes. When variables such as this were not controlled, the results may not have been valid. The second factor to consider is that nationally, mean scores of vocational-technical students (on the Attitude Scale) are significantly lower than those of college preparatory students.

These factors may have had some bearing on the findings on the study by Bearden. In the only study completed on occupational exploration and occupational investigation, he found that Occupational Orientation courses did not materially affect the career maturity of ninth-grade male students in Greenville I.S.D. Length of course exposure and race were evaluated. This conclusion was reached by comparing the Career Maturity Inventory scores of ninth-grade "academic" students and those who had completed one or two years of Occupational Orientation. Part of his findings supported the conclusion that the planning ability of students who completed two years of Occupational Orientation "appeared to have deteriorated."

Barnes found that students who completed two semesters of occupational investigation demonstrated a significant gain in CMI scores over one-semester students. There were also significant gains in the Competence Tests of the CMI of students who completed one semester of occupational investigation versus those who did not. He concluded that evidence indicated that occupational investigation affected the career maturity of students.

Magill also found a positive effect on the career maturity of seventh- and eighth-grade students who completed occupational investigation. They scored significantly higher than the control groups who did not take the class. All black and female students scored significantly higher than blacks and females in the control group. Males in the experimental group scored higher, but not significantly so.

Gabryl, in a study completed for North East I.S.D., administered an adaptation of the CMI Attitude Survey to a control and experimental group of seventh-grade students. He concluded that students enrolled in an occupational investigation class had a significantly higher development of positive attitudes toward work and choosing careers as compared to other students.

When students enrolled in occupational investigation and band at Northwest I.S.D. were compared, their career attitudes were virtually the same. It was assumed the band students would score higher, but they did not. The occupational investigation students who had completed twelve weeks of training scored higher on the Attitude Scale of the CMI, but not significantly so.

Based on the perceptions of seniors, Witherspoon found that students who had completed occupational investigation scored significantly higher on measurements of six variables. Using matched groups he compared seniors who had completed occupational investigation in the eighth grade with a control group who had not. He concluded that the experimental group was better prepared to set goals with regard to career training, displayed a more positive attitude toward the world of work and dignity of labor, had a better awareness of self than those who did not, were better able to identify career and occupational opportunities, were better able to relate school life to work, and were better able to formulate educational plans.

Lackey found no significant differences in the self esteem scores between an experimental (occupational investigation students) and a control group. However, she did find a significant difference in the scores representing locus of control between the two groups. It should be noted that the treatment--two instructional modules in the occupational investigation instructional areas of self appraisal and the occupational clusters--totaled sixteen hours of instruction. The researcher concluded that "both self esteem and locus of control are difficult to change, and to expect significant changes may require more intensive and longer periods of treatment" (p. 79).

In one of the first evaluations of Occupational Orientation completed by Huffstutler, et al. in 1973 it was concluded that the instruction was apparently very effective. Program personnel interviewed felt that student participants did significantly change their attitudes toward school and there was some objective evidence that the programs had some impact upon students' enthusiasm for learning. Also, the attitude of student participants toward the world of work and the dignity of labor and occupations did improve somewhat significantly during the program.

In two curriculum research studies completed by Hollenback, ancillary information gathered provided evidence that both occupational investigation and occupational exploration programs at the local level were very diverse in their organization and philosophy. Forty-four percent of the occupational investigation units were required. Nearly three-quarters of the occupational investigation teachers did not use advisory committees for curriculum input.

In a pilot study to evaluate the Vocational Education Evaluation Survey, a small number of school districts in south Texas evaluated their Occupational Orientation Programs. There were several areas that were evaluated as strengths for both occupational investigation and occupational exploration. These areas include sex equity and meeting the needs of special populations. The occupational investigation programs were rated high in their delivery of instruction. However, neither program had made use of their advisory committees for review of program goals and instructional objectives. Another weakness in both programs was lack of local education agency program review by administering a follow-up survey to senior students.

Six evaluations or follow-up studies completed by local education agencies demonstrated an over-all positive picture of the effects of Occupational Orientation. White Settlement I.S.D. surveyed their graduating seniors to evaluate the students' experiences in occupational investigation. Their responses were favorable. Over 50 percent reported they would recommend the class to others.

Commerce I.S.D. surveyed students as they finished an occupational investigation program. Again student responses were very favorable and the instruction they received was perceived as being good.

From follow-up data gathered by the vocational director, a large percentage of students enrolled in the Greenville I.S.D. occupational exploration program enroll in the District's skill training programs for further training. The only exception to this was the electronics laboratory.

Both occupational investigation and occupational exploration programs were evaluated locally by North East I.S.D. in San Antonio. High school students were asked to evaluate their experiences in occupational investigation taken in seventh grade. A majority of students were aware of the course objectives and felt they received adequate instruction in the study of occupations and in planning for their successful entry in the world of work.

The results of the occupational exploration survey were also generally positive regarding both the course and instructor. However, one major finding was that the majority of students did not see the course as a career exploratory program but as a shop class or more specifically as industrial arts.

Recommendations

Personal testimony and individual success stories abound in the field on the value of Occupational Orientation. However, actual objective data are difficult to find. The ramifications of thirteen years of program development without accompanying evaluation was felt during this--the year of H.B. 246. There appeared, briefly, an opportunity to have either occupational investigation or occupational exploration required for school districts offering vocational training. But, the worth and/or effects of Occupational Orientation could not be successfully demonstrated. What resulted was another prevocational course being approved to be offered as an elective--a course which duplicates much that is contained in Occupational Orientation courses.

If Occupational Orientation is to remain a viable part of the Texas Vocational Guidance system, more research into the effectiveness of the instruction, evaluation of programs and follow-up of students must be accomplished.

The following specific recommendations are made for future Occupational Orientation program development.

1. More research on Occupational Orientation needs to be undertaken. Support services and/or small grants should be made available to graduate students to encourage research into the effects of Occupational Orientation on students.

2. Original testing instruments which measure the knowledge and skills contained in Occupational Orientation curriculum need to be used when evaluating student performance.

3. An evaluation, follow-up, and research handbook needs to be developed for use by vocational teachers, counselors, and administrators.

4. Local qualitative evaluations should be required for all local Occupational Orientation programs.

5. A follow-up system should be developed for Occupational Orientation students to:

a. determine how many go into further vocational education courses,

b. ascertain its effects on non-traditional enrollment, and

c. measure its use by students for educational planning, job acquisitions, occupational choice, and mastery of economic and employability skills.

Bibliography

1. Barnes, William James, "The Effect of Occupational Investigation Programs on Ninth-Grade Students as Measured by the Career Maturity Inventory," unpublished doctoral dissertation, East Texas State University, 1974.

2. Bearden, Vance Keith, "The Effects of an Occupational Exploration Course on Facilitating the Career Maturity of Ninth-Grade Male Students," unpublished doctoral dissertation, East Texas State University, 1975.

3. Coopersmith, Stanley, The Antecedents of Self-Esteem, San Francisco, W. H. Freeman and Company, 1967.

4. Crites, John O., Career Maturity Inventory Administration and Use Manual, California, McGraw-Hill, Inc., 1973.

5. Gabryl, Roy, "A Study in Career Choosing and Work Attitudes of Seventh-Grade Students," unpublished report, North East Independent School District, San Antonio, Texas, 1981.

6. ____________, "Occupational Orientation (Exploration) Program Evaluation Report," unpublished report, North East Independent School District, San Antonio, Texas, 1982.

7. ____________, "Occupational Orientation (Investigation) Program Evaluation Report," unpublished report, North East Independent School District, San Antonio, Texas, 1982.

8. Hollenback, Kathryn, "Assessment of Occupational Exploration Programs and Resource Materials," unpublished materials, Texas Education Agency, Austin, Texas, 1980.

9. ____________________, "An Assessment of Occupational Orientation Investigation Activities and Course Content at the Local Level to Determine Its Effectiveness," unpublished materials, Texas Education Agency, Austin, Texas, 1980.

10. Huffstutler, E. Vaughan, et al., Search for Effectiveness of the Occupational Orientation Programs in the State of Texas, final report, E.P.D. Consortium D, Richardson, Texas, June, 1973.

11. Jernigan, Arthur, Vocational Director, Greenville Independent School District, Greenville, Texas, Interview, March 9, 1984.

12. Lackey, Sheryl Lynn, "Effects of Occupational Investigation on Selected Eighth-Grade Students' Self-Esteem and Locus of Control," unpublished doctoral dissertation, East Texas State University, 1981.

13. Laws, Nancy, "Evaluation of Occupational Investigation by Students," unpublished report, Commerce Independent School District, Commerce, Texas, 1983.

14. Magill, Charles L., "The Effects of an Occupational Investigation Program Upon the Career Maturity of Students at a Career Academy within the Magnet School Concept," unpublished doctoral dissertation, East Texas State University, 1979.

15. Mayfield, Tim and Carolyn Smith, "A Four-Year Follow-Up Survey for Occupational Orientation Investigation," unpublished report, White Settlement Independent School District, Fort Worth, Texas, 1983.

16. Mokaramane, Penpun, "The Effects of an Occupational Investigation Course on the Career Attitudes of Eighth-Grade Students," unpublished paper, North Texas State University, Denton, Texas, 1984.

17. Research Coordinating Unit, "Requests for Proposals," a manual, Texas Education Agency, Austin, Texas, March, 1983.

18. Rivas, Maria Olivia, "Effects of a Career Development Program on Selected Variables of Disadvantaged Mexican-American Students," unpublished doctoral dissertation, East Texas State University, 1978.

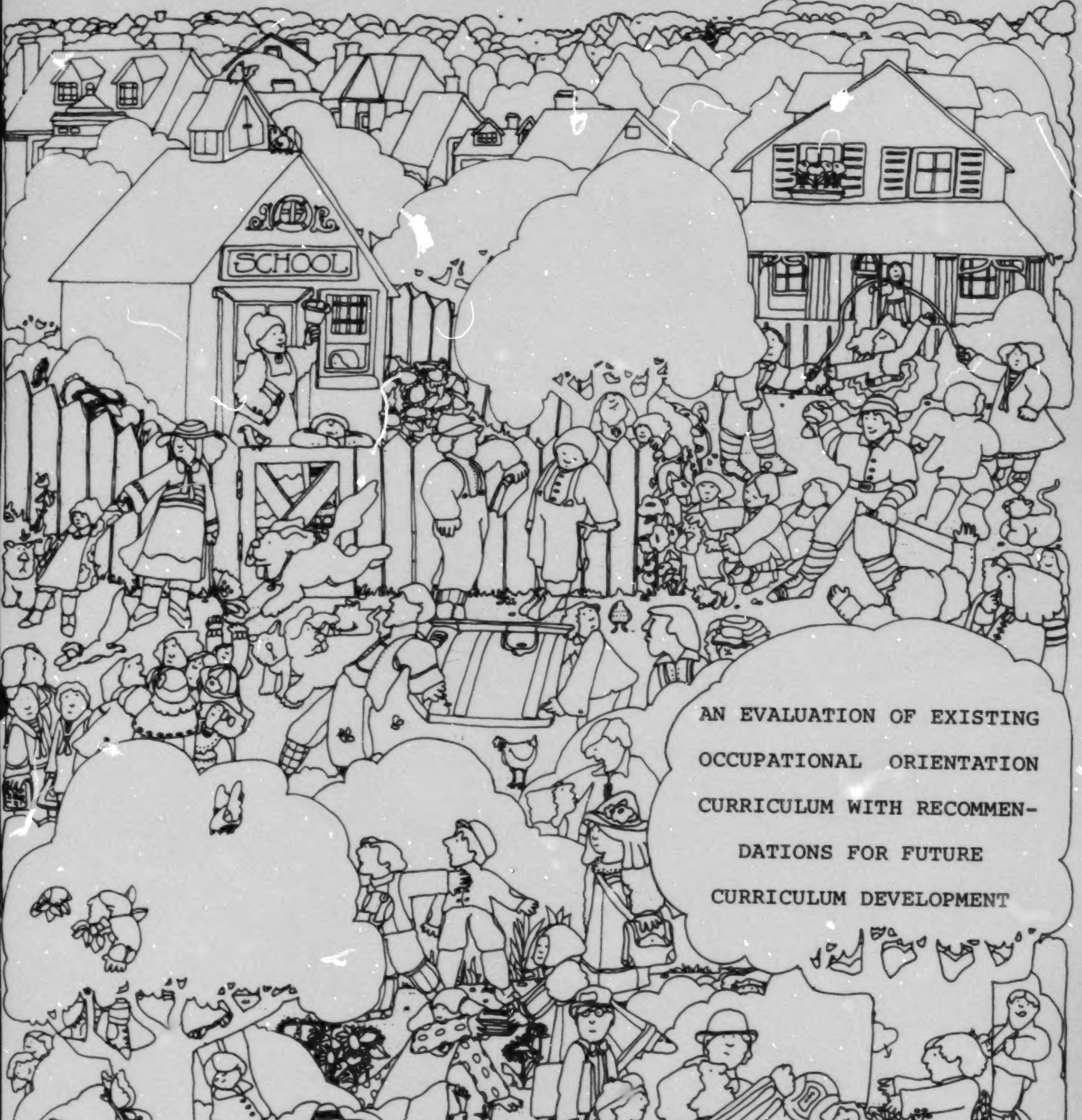
19. Rotter, Julian B., "Generalized Expectancies for Internal Versus External Control of Refinforcement," Psychological Monographs: General and Applied, 80 (1966), 1-28.

20. Texas Career Education Measurement Series: A Student Needs Assessment, Texas Education Agency, Austin, Texas, 1976.

21. Texas Education Agency (V.E.E.S.), "Occupational Exploration Questionnaire," a computer print-out, Austin, Texas, December 6, 1983.

22. Texas Education Agency (V.E.E.S.), "Occupational Investigation Questionnaire," a computer print-out, Austin, Texas, December 6, 1983.

23. Witherspoon, Travis J., "A Study of Occupational Investigation Programs in Texas via Student Perception," unpublished doctoral dissertation, East Texas State University, 1978.



AN EVALUATION OF EXISTING OCCUPATIONAL ORIENTATION CURRICULUM WITH RECOMMENDATIONS FOR FUTURE CURRICULUM DEVELOPMENT

PART II

Introduction

The curriculum content of occupational investigation is a result more of evolution than creation (for a complete description of curriculum/instructional development for Occupational Orientation see Hollenback, 1980, pp. 2-4). The final step in an "inverted curriculum" development process will have been completed concurrently with this research study. That final step, developing required student-learner outcomes for Occupational Orientation was based on the findings of this research and the proposed guidelines established in Texas House Bill 246.

Project staff members worked closely with personnel from East Texas State University's Occupational Curriculum Laboratory to insure the information they needed to write a comprehensive curriculum for Occupational Orientation was obtained. The data reported in this section were furnished to them on November 4, 1983 during a joint planning session held in Commerce, Texas.

Due to the diversity inherent in local Occupational Orientation Programs, it is not possible to develop one curriculum with a defined scope and sequence (for a complete description of local programs see Part IV, pp.111 to 152). This necessitates putting student-learner outcomes in a priority order to allow for variations in the local education agencies length of courses and student populations. Therefore, this research identified what should be taught and what objectives were most important.

Problem of the Study

Occupational Orientation needed specific student-learner outcomes to provide scope to the curriculum. In the past, the course content was left to the discretion of the individual local education agencies. Specificity in the curriculum was needed to meet the mandates of House Bill 246 (see Appendix E) and evaluation requirements of the Vocational Education Evaluation System (V.E.E.S.). The problem of this study was to produce a list of objectives for Occupational Orientation by a consensual validation process. This list then provided a foundation for East Texas State University's Occupational Curriculum Laboratory to develop student-learner outcomes and instructional materials for Occupational Orientation instruction.

Statement of the Purpose

The purposes of the research reported in this section were to (1) establish the sequence of instruction for occupational investigation by revalidating the priority listing of terminal performance objectives and enabling objectives developed in 1980; (2) identify the types of instructional materials needed for Occupational Orientation; and (3) make recommendations to the East Texas State University Occupational Curriculum Laboratory for developing new curriculum and instructional materials for Occupational Orientation.

Research Questions

1. Is there a difference between the Self Appraisal Terminal Performance Objective order as ranked by Occupational Orientation teachers in 1980 and 1983?
2. Is there a difference between the Educational Planning and Decision Making Terminal Performance Objective order as ranked by Occupational Orientation teachers in 1980 and 1983?
3. Is there a difference between the social factors of the Socioeconomic Terminal Performance Objective order as ranked by Occupational Orientation teachers in 1980 and 1983?
4. Is there a difference between the economic factors of the Socioeconomic Terminal Performance Objective order as ranked by Occupational Orientation teachers in 1980 and 1983?
5. Is there a difference between the Fifteen Clusters Terminal Performance Objective order as ranked by Occupational Orientation teachers in 1980 and 1983?
6. Is there a significant difference between the total means of the Self Appraisal Enabling Objectives reflecting a variation in the objective ratings of Occupational Orientation teachers in 1980 and 1983?
7. Is there a significant difference between the total means of the Educational Planning and Decision Making Enabling Objectives reflecting a variation in the objective ratings of Occupational Orientation teachers in 1980 and 1983?
8. Is there a significant difference between the total means of the social factors of the Socioeconomic Enabling Objectives reflecting a variation in the objective ratings of the Occupational Orientation teachers in 1980 and 1983?
9. Is there a significant difference between the total means of the economic factors of the Socioeconomic Enabling Objectives reflecting a variation in the objective ratings of the Occupational Orientation teachers in 1980 and 1983?

10. Is there a significant difference between the total means of the Fifteen Clusters Enabling Objectives reflecting a variation in the objective ratings of the Occupational Orientation teachers in 1980 and 1983?

11. What changes need to be made in the existing curriculum outline for occupational investigation to improve instruction for Occupational Orientation Programs?

12. What teaching/professional needs do Occupational Orientation teachers have in the area of "Classroom Management"?

13. What teaching/professional needs do Occupational Orientation teachers have in the area of "Instructional Materials"?

14. What teaching/professional needs do Occupational Orientation teachers have in the area of "References for Writing Curriculum"?

Instrumentation

Two surveys were used to ascertain the Occupational Orientation Program curriculum and instructional needs as perceived by the Occupational Orientation teachers. Both surveys had been developed previously for two separate research studies funded by the Research Coordinating Unit of the Division of Occupational Education and Technology in the Texas Education Agency.

Curriculum Questionnaire

Part of the curriculum content questionnaire (see Appendix B) was originally developed for an assessment of occupational investigation instructional activities and course content completed in 1980 (2). The purpose of this study was "to make an assessment of current occupational investigation curricula at the local level, and from that assessment develop and validate terminal performance objectives and enabling objectives" (2, p. 4).

For the purposes of this study, all of the previous survey developed for the 1980 study was used. A new demographic section was added, as was a section allowing for specific review of the curriculum outline established in 1980. The three sections, curriculum content survey, demographic section, and curriculum review section, made up the Occupational Orientation Curriculum Questionnaire.

In the curriculum content section, teachers were asked to rank the terminal performance objectives for each instructional area: Self Appraisal, educational planning and decision making, socioeconomic factors, and fifteen clusters. Because socioeconomic factors had a total of twelve terminal performance objectives, it was further broken into two sub-sections, social factors and economic factors. The decision to sub-divide these terminal performance objectives was based on the rationale that twelve items were too many for respondents to adequately rank.

To rank the enabling objectives, teachers were asked to rate each objective: (3) Must be taught, (2) Should be taught, (1) No need to teach, and (0) No opinion. The means were then used to determine a priority of objectives.

The curriculum review section was simply a copy of the existing suggested curriculum outline for occupational investigation developed in 1980 with space provided for specific comments. This section was added to provide the Occupational Curriculum Laboratory with teachers' review comments on how various objectives fit their programs. A complete listing of the comments gathered and the priority ranking were used by the Curriculum Laboratory to develop the new curriculum for Occupational Orientation.

Needs Assessment Questionnaire

The second questionnaire used was an adaptation of the needs assessment instrument developed for a research project (1) completed during the 1980-1981 school year. It was designed to assess the status quo of occupational exploration programs in Texas. (See Appendix B.) The purpose of the research "was to undertake a needs assessment process to ascertain the instructional and curricular needs of the forty-six individual units of occupational exploration as perceived by the teachers and to identify materials generally and/or specifically required to meet those needs" (1, p. 2).

The original instrument was administered exclusively to occupational exploration teachers. Because the instrument for this research was to be administered to both occupational exploration and occupational investigation teachers, minor changes were made. Some terminology was changed to reflect the guidelines for curriculum preparation placed on the Occupational Curriculum Laboratory by the Request for Proposals, C-10 (4). These changes were suggested by their staff.

The instrument was designed to identify the discrepancies, if any, between the quantity and importance of various curricular/instructional items in the areas of classroom management, instructional materials, and references for writing curriculum. Items could then be placed in priority order based on the teachers' perceived needs.

Data Analysis

Data entry for the Occupational Orientation curriculum questionnaire was done directly from the questionnaire. Data from the needs assessment questionnaire were transferred to computer coding forms for data entry. The data collected were sent to the Computer Center at North Texas State University for data entry procedures. Using subprograms from the Statistical Package for the Social Sciences (SPSS) (3) the data were tabulated by determining the frequency and percentage of teachers responding to the items and mean scores were calculated. The mean scores were used as the determinate for the priority listing of objectives used by the Occupational Curriculum Laboratory at East Texas State University to develop new curriculum materials and for establishing a priority of needs for curricular/instructional items.

To determine if there were significant differences in the ranking of the enabling objectives, a one-way analysis of variance was used. The mean scores of the 1980 sample of occupational investigation teachers were compared with the mean scores of the current sample.

Demographic Section

(Profile of Respondents)

Occupational Orientation teachers who attended the Vocational Guidance Personnel Workshop held July 31-August 3, 1983 in Austin, Texas were asked to complete two surveys. One survey was entitled "Occupational Orientation Curriculum Questionnaire," the other "Occupational Orientation Teacher Education Certification Questionnaire" (developed for Part III of this study). It was necessary to include the needs assessment survey in the teacher education questionnaire because of time restraints. The curriculum questionnaire required a minimum of one hour to complete. Therefore, in an attempt to equalize the completion time for the two questionnaires, it was decided that the needs assessment survey should be included in the teacher certification questionnaire.

Occupational Orientation teachers who attended the Conference were asked to complete an Occupational Orientation Curriculum questionnaire if they had a minimum of one year's teaching experience teaching Occupational Orientation. Of the 125 teachers who attended the Conference, 55 or 44.0 percent completed and returned their questionnaires. It was not known how many of the total number of teachers attending the Conference met the criterion of having one year's experience teaching Occupational Orientation. However, because so many beginning teachers attend inservice, it is assumed that the percentage of respondents meeting all criteria and returning surveys was over 70 percent.

Demographic data for the curriculum questionnaire respondents are presented in Tables IV, V, and VI. The demographic data for the teachers responding to the needs assessment survey can be found in Part III of this study, pages 76 through 78.

TABLE IV

OCCUPATIONAL ORIENTATION TEACHING EXPERIENCE OF THE CURRICULUM SURVEY RESPONDENTS

Years Experience	Frequency	Percent	Adjusted Percent
One	13	23.6	24.5
Two	10	18.2	18.9
Three	7	12.7	13.2
Four	4	7.3	7.5
Five	4	7.3	7.5
Six	6	11.0	11.3
Eight	2	3.6	3.9
Nine	1	1.8	1.9
Ten	4	7.3	7.5
Eleven	1	1.8	1.9
Thirteen	1	1.8	1.9
Missing	2	3.6	. . .
Total	55	100.0	100.0

TABLE V

TEACHING AREA OF CURRICULUM SURVEY RESPONDENTS (N = 55)

Program Area	Frequency	Percent	Adjusted Percent
OI	52	94.6	96.3
OE	2	3.6	3.7
Missing Data	1	1.8	. . .
Total	55	100.0	100.0

TABLE VI

CERTIFICATION STATUS OF CURRICULUM SURVEY RESPONDENTS (N = 55)

Survey	Frequency	Percent	Adjusted Percent
Certified	27	49.1	67.5
Non-Certified	13	23.6	32.5
Missing Data	15	27.3	. . .
Total	55	100.0	100.0

Curriculum Content Section

(Data Establishing Priority for Occupational Orientation Student-Learner Outcomes)

In 1980 three populations were surveyed to establish a priority of objectives for an occupational investigation curriculum outline. The three populations were occupational investigation teachers, students who had completed occupational investigation and members of occupational investigation advisory committees. For the purposes of this research, comparisons were made between the objective rankings made by occupational investigation teachers surveyed in 1980 and Occupational Orientation teachers attending the State Vocational Guidance Conference in 1983.

Rankings of both terminal performance objectives and enabling objectives were established by the individual mean scores. To determine if there were significant differences between the enabling objectives, a one-way analysis of variance was used as the statistical procedure. The statistical test was run on all enabling objectives grouped for each instructional area. Individual testing of the enabling objectives was not needed. The Occupational Curriculum Laboratory staff had determined they would go with the 1983 Occupational Orientation teacher ranking to determine the priority for the student-learner outcomes.

Tables VII through XI present the teachers' rankings of terminal performance and enabling objectives by instructional area for 1980 and 1983. They include the rank, means, and denotation of variation between original and current rankings if present.

Self appraisal.--Table VII contains the rankings for the terminal performance objectives and enabling objectives for the instructional area self appraisal.

TABLE VII

SELF APPRAISAL OBJECTIVES RANKED BY MEANS AND COMPARED TO 1980 RANKING

Survey Number	Objectives	1980 Rank	1980 Mean	1983 Rank	1983 Mean	*
	Terminal Performance Objective					
II.	Demonstrate a positive attitude toward themselves and others.	I	1.325	I	1.315	
	Enabling Objectives					
7.	Understand that their self concepts influence their ability to succeed.	2	2.707	1	2.800	*
14.	Work together with others.	3	2.671	2	2.727	*
1.	Show cooperation and consideration for fellow students.	1	2.679	3	2.673	*
8.	Describe themselves as unique individuals.	5	2.488	4	3.648	*
15.	Describe "good" manners both on the job and in social relationships.	6	2.494	5	2.636	*
10.	Demonstrate the knowledge that they have the ability to change themselves if they so desire.	7	2.549	6	2.545	*
12.	Describe how attitudes based on prejudice affect the behavior of other individuals.	4	2.198	7	2.283	*
9.	Identify traits which are important to having a pleasing personality.	9	2.321	8	2.173	*
11.	Describe the advantages and disadvantages of being a leader and/or a follower.	8	2.026	9	2.074	*
	Terminal Performance Objective					
I.	Complete the steps necessary in conducting a self appraisal.	II	2.237	II	2.204	
	Enabling Objectives					
3.	Identify their own interests.	2	2.595	1	2.891	*
2.	Identify their own abilities.	5	2.553	2	2.855	*
4.	Identify their own aptitudes.	4	2.548	3	2.782	*
1.	Identify their own values.	1	2.602	3	2.782	*
5.	Identify their personal assets (strong points).	3	2.548	4	2.727	*
6.	Identify their liabilities (weak points).	6	2.464	5	2.673	
	Terminal Performance Objective					
IV.	Understand that people change their careers throughout life.	III	2.950	III	2.833	
	Enabling Objectives					
19.	Compare their salable skills to those required in the job market.	2	2.366	1	2.636	*
20.	Identify different motives for working and choosing various types of employment.	1	2.434	2	2.582	*
	Terminal Performance Objective					
III.	Understand the importance of doing well on tests.	IV	3.425	IV	3.481	

TABLE VII--Continued

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Enabling Objectives					
16.	Describe how different types of tests such as interest, aptitude and achievement tests can help select occupations.	1	2.349	1	3.537	
17.	Explain why employers administer tests to persons applying for a job.	2	2.298	2	2.400	
18.	Identify ways to improve test scores.	3	1.937	3	2.208	

*Variation between the 1980 and 1983 rankings.

The ranking for the terminal performance objectives remained the same as in 1980. A one-way analysis of variance on all the enabling objectives for self appraisal showed a significant difference in the mean scores of the 1980 and 1983 teacher ratings as reported in Table XII. It appears that the 1983 respondents consistently rated the enabling objectives higher.

A review of the self appraisal enabling objectives reveals that there was variation in the 1980 and 1983 rankings with the exception of the enabling objectives under the fourth terminal performance objective. The three objectives retained their original ranking in that section.

Educational planning and decision making.--The ranked order for the five terminal performance objectives "Educational Planning and Decision Making" are in Table VIII. The last three terminal performance objectives retained the same ranked order. However, the first two varied. "Use a logical decision-making process to solve personal and career problems" was ranked second in 1980 and first in 1983. It changed ranking with "Evaluate their present performance in school and relate it to their future plans for education/training."

Also reported in Table VIII is the ranking for the enabling objectives. Two of the five sections retained the same ranking. It should be noted that when variation in the rankings was present, it was slight, i.e., one place.

As reported in Table XII there is a significant difference in the ratings of the enabling objectives. The means were consistently higher, or perceived as being more important to teach by the 1983 group of teachers.

BEST COPY AVAILABLE

TABLE VIII

EDUCATIONAL PLANNING AND DECISION MAKING OBJECTIVES RANKED BY MEANS AND COMPARED TO 1980 RANKING

Survey Number	Objective	1980		1983		*
		Rank	Mean	Rank	Mean	
	Terminal Performance Objective					
IV.	Use a logical decision-making process to solve personal and career problems.	II	2.949	I	2.327	
	Enabling Objectives					
35.	Apply decision-making steps to make occupational choices.	1	2.405	1	2.630	
36.	Apply decision-making steps to solve personal problems.	2	2.215	2	2.481	
34.	Identify examples of logical and emotional decisions.	3	2.038	3	2.245	
	Terminal Performance Objective					
II.	Evaluate their present performance in school and relate it to their future plans for education/training.	I	2.316	II	2.527	
	Enabling Objectives					
28.	Identify the types of education/training which would help them achieve a career goal.	1	2.576	1	2.691	
26.	Compare the similarities between school and work, realizing that their present occupation is student.	2	2.524	1	2.691	
25.	Relate various scholastic grade averages to requirements of education/training institutions.	3	1.963	2	2.164	
	Terminal Performance Objective					
V.	Use goals to achieve personal and professional success.	III	3.025	III	2.891	
	Enabling Objectives					
38.	Understand that personal goals should be matched to career choices for a happier life.	2	2.541	1	2.667	*
37.	Define the term "goal."	1	2.548	2	2.509	*
41.	Complete a tenative career plan.	4	2.195	3	2.491	*
40.	Differentiate between needs and wants.	3	2.337	4	2.463	*
39.	Differentiate between short, medium and long range goals.	5	2.325	5	2.434	
	Terminal Performance Objective					
I.	Complete a tenative high school schedule that meets the local school district's requirements for graduation.	IV	3.316	IV	3.218	

TABLE VIII--Continued

Survey Number	Objective	1980		1983		*
		Rank	Mean	Rank	Mean	
	Enabling Objectives					
24.	Describe the vocational programs available to them at the high school level.	2	2.536	1	2.709	*
22.	Describe which electives will help them in preparing for particular occupations.	1	2.393	2	2.655	*
21.	Identify the requirements for high school graduation in their district.	4	2.289	3	2.582	*
23.	Describe the academic and general education programs available to them at the high school level.	3	2.369	4	2.527	*
	Terminal Performance Objective					
III.	Describe the education/training possibilities available to them after leaving high school.	V	3.316	V	3.636	
	Enabling Objectives					
30.	Explain why a worker with more education and experience will qualify for a higher level occupation within a career field.	1	2.506	1	2.611	
27.	Evaluate how much education/training they are willing to pursue in relationship to the requirements of the occupations in which they are interested.	4	2.435	2	2.600	*
31.	Develop an education/training plan that fits occupations of their choice.	2	2.253	3	2.556	*
29.	Describe education/training methods which are alternatives to college.	3	2.600	4	2.545	*
32.	Describe sources of education/training information.	5	2.337	5	2.444	
33.	Identify sources of financing for continued education/training.	6	1.928	6	2.098	

Socioeconomic factors.--The rankings for the "social" aspects for socioeconomic factors instructional areas are in Table IX. Again, the terminal objectives retained the same ranked order as in 1980. Of the five instructional area sections, this section was the most congruent to the 1980 statistics. It was the only section of enabling objectives that did not have a significant difference between the total means. Both groups of teachers rated the objectives similarly. The f ratio is reported in Table XII. Furthermore, three of the six enabling objectives sections retained the same ranked order.

BEST COPY AVAILABLE

TABLE IX

SOCIAL ASPECTS OF SOCIOECONOMIC OBJECTIVES RANKED BY MEANS AND COMPARED TO 1980 RANKING

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Terminal Performance Objective					
III.	Describe those things that contribute to being successful on the job.	I	1.759	I	1.889	
	Enabling Objectives					
55.	Accept personal responsibility.	1	2.765	1	2.836	
58.	Understand the importance of staying with a task until it is completed.	2	2.667	2	2.796	
66.	Identify the causes of failure on the job.	6	2.726	3	2.778	*
52.	Determine qualities contributing to employability.	8	2.651	4	2.704	*
57.	Describe the concept of quality in relationship to a task or job.	3	2.500	5	2.685	*
	Understand the consequences of not working.	7	2.651	5	2.685	*
56.	Properly care for and use equipment and materials.	10	2.500	6	2.667	*
53.	Display pride in their work.	4	2.690	7	2.655	*
63.	Describe the importance of being loyal to an employer.	5	2.434	8	2.604	*
54.	Understand the importance of being consistent.	11	2.417	9	2.564	*
60.	Identify good grooming habits.	9	2.518	10	2.547	*
64.	Understand that employers need to be loyal to their employees.	13	2.402	10	2.547	*
62.	Understand that employees work together to reach the common goals of a company.	12	2.393	11	2.519	*
61.	Describe the merit of good grooming	14	2.470	12	2.500	
59.	Describe how workers receive job promotions.	15	2.405	13	2.491	
67.	Explain proper procedures to use in resigning from a job.	16	2.235	14	2.442	
	Terminal Performance Objective					
II.	Give and receive instructions.	II	2.152	II	2.315	
	Enabling Objectives					
48.	Demonstrate the ability to follow directions.	1	2.788	1	2.870	
	Understand the need to talk on some occasions and the need to listen in other situations.	3	2.595	2	2.774	*
49.	Understand the need for good grammar and spelling in order to communicate with others.	4	2.659	3	2.759	*
47.	Demonstrate good listening skills.	2	2.583	4	2.698	*
	Terminal Performance Objective					
V.	Identify the factors that determine lifestyle.	III	3.101	III	2.907	

TABLE IX--Continued

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Enabling Objectives					
68.	Understand that all work has dignity.	1	2.694	1	2.868	
70.	Relate how much it costs to maintain a certain standard of living.	2	2.375	2	2.346	
69.	Relate a described lifestyle to occupations that would make that lifestyle possible.	3	2.275	3	2.340	
	Terminal Performance Objective					
IV.	Describe the unique environmental social and economic factors of their community and surrounding area.	IV	3.987	IV	3.519	
	Enabling Objectives					
51.	Determine the labor demands of their community.	1	2.084	1	2.189	
50.	Identify various civic organizations and describe how they contribute to improving their communities.	2	1.833	2	1.878	**
	Terminal Performance Objective					
I.	Use the telephone correctly.	V	4.726	V	4.500	
44.	Arrange for a job interview by phone.	1	2.400	1	2.604	
45.	Demonstrate the ability to answer the phone properly.	2	2.169	2	2.346	
42.	Demonstrate the ability to complete formal calls to strangers.	3	2.048	3	2.137	
43.	Place a long distance phone call.	4	1.877	4	1.961	**
	Terminal Performance Objective					
VI.	Understand the role of unions and professional organizations.	VI	4.810	VI	5.204	
	Enabling Objectives					
71.	Describe apprenticeship.	1	2.244	1	2.519	
72.	Explain the purposes of professional organizations and unions.	3	1.975	2	1.980	* **
73.	Identify the advantages and disadvantages of membership in unions and professional organizations.	2	2.000	3	1.941	* **

**Below 2.0 rating.

There were four enabling objectives that fell below the 2.0 level ("Should be taught"). Those four objectives were Objective 50, "Identify various civic organizations and describe how they contribute to improving their communities"; Objective 43, "Place a long distance call"; Objective 72, "Explain the purposes of

BEST COPY AVAILABLE

professional organizations and unions"; and Objective 73, "Identify the advantages and disadvantages of membership in unions and professional organizations."

As reported in Table X there was variation in the ranking of the terminal performance objectives for the "economic" aspects of the socioeconomic instructional area. Terminal performance objective "Demonstrate job acquisition skills" was ranked second in 1980 and first in 1983. It changed ranks with "Demonstrate the ability to use identified methods of finding employment."

Two other terminal performance objectives switched ranks. "Perform government regulated work tasks, such as applying for a social security card" was ranked fourth in 1980 and third in 1983. Conversely, "Demonstrate the skills necessary to practice personal money management" was third in 1980 and fourth in 1983. The last two terminal performance objectives retained the same rankings.

TABLE X

ECONOMIC ASPECTS OF SOCIOECONOMIC OBJECTIVES RANKED BY MEANS AND COMPARED TO 1980 RANKING

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Terminal Performance Objective					
V.	Demonstrate job acquisition skills.	II	2.500	I	2.036	*
	Enabling Objectives					
101.	Correctly fill out job application forms.	1	2.824	1	2.926	
102.	Participate in a job interview.	2	2.762	1	2.926	
103.	Compose a personal resume.	3	2.398	2	2.759	
	Terminal Performance Objective					
IV.	Demonstrate the ability to use identified methods of finding employment.	I	2.115	II	2.182	*
	Enabling Objectives					
95.	Understand and use the classified ad section.	4	2.635	1	2.741	*
100.	Identify people to contact when looking for employment.	2	2.602	2	2.667	
96.	Read classified ad abbreviations.	1	2.619	3	2.593	*
94.	Write a letter requesting a job application.	3	2.398	4	2.556	*
93.	Write a letter using a standard business letter form.	5	2.190	5	3.481	
98.	Describe the differences and similarities between private and public employment agencies.	7	2.349	6	2.472	*
97.	Use resources provided by the Texas Employment Commission.	6	2.325	7	2.426	*
99.	Explain how private employment agencies find occupations for individuals.	8	2.325	8	2.377	

TABLE X--Continued

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Terminal Performance Objective					
II.	Perform government regulated work tasks, such as applying for a social security card.	IV	3.795	III	3.582	*
	Enabling Objectives					
81.	Complete a request form for a social security card.	1	2.405	1	2.463	
86.	Describe the purpose and application of equal employment opportunity.	3	2.253	1	2.463	*
85.	Identify jobs legally available to them presently.	2	2.417	2	2.377	
84.	Describe child labor laws which regulate their ability to work.	6	2.217	3	2.264	*
82.	Explain benefits received from social security.	4	2.226	4	2.250	
80.	Fill out an income tax W-4 form (withholding statement).	5	1.962	5	2.151	*
83.	Apply for an income tax refund.	7	1.816	6	1.917	**
	Terminal Performance Objective					
III.	Demonstrate the skills necessary to practice personal money management.	III	3.590	IV	3.745	*
	Enabling Objectives					
87.	Demonstrate a realistic knowledge of the value of money and what it brings.	2	2.337	1	2.509	*
88.	Demonstrate the ability to plan a budget.	4	2.241	2	2.444	*
90.	Demonstrate skills necessary for maintaining a checking account.	1	2.268	3	2.289	*
91.	Describe how credit works.	3	2.136	4	2.278	*
89.	Demonstrate skills necessary for maintaining a savings account.	5	2.100	5	2.204	
92.	Identify different types of financial interest.	6	1.731	6	1.940	**
	Terminal Performance Objective					
I.	Develop a basic understanding of the economy.	V	4.513	V	4.164	
	Enabling Objectives					
78.	Realize that changes in technology will affect their work and make it necessary to retrain.	1	2.463	1	2.709	
75.	Describe how work, occupations, goods and services are related to each other.	5	2.148	2	2.604	*
79.	Describe the difference between producing goods and producing services.	2	2.195	3	2.370	*
74.	Identify the characteristics of a free enterprise economy.	6	1.833	4	2.231	*
76.	Relate cost of living to inflation.	3	2.012	5	2.182	*
77.	Define inflation.	4	2.038	6	2.164	*

BEST COPY AVAILABLE

TABLE X--Continued

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Terminal Performance Objective					
III.	Demonstrate a knowledge of how employees are paid.	VI	4.385	VI	4.655	
	Enabling Objectives					
106.	Differentiate between gross and net pay.	1	2.583	1	2.691	
105.	Describe on-the-job worker benefits.	2	2.400	2	2.545	
104.	Describe different types of pay.	4	2.361	3	2.481	*
107.	Differentiate between voluntary and involuntary deductions.	6	2.272	4	2.463	*
108.	Compute payroll deductions.	3	2.200	5	2.444	*
109.	Understand the necessity of time clocks and how they are used.	5	2.262	6	2.291	*

**Below 2.0 rating.

An analysis of variance between the total means of the enabling objectives for this instructional area revealed a significant difference between the objective rating by teachers in 1980 and 1983. The level of significance is reported in Table XII. There was also considerable variation in the ranking of the enabling objectives for five of the six sections.

It should be noted that Objective 83, "Apply for an income tax refund" fell below 2.0 or the "Should be taught" range in 1983, as did Objective 92, "Identify different types of financial interest."

Although there was a significant difference, as reported in Table XII, between the ratings of the enabling objectives for the "Fifteen Clusters" instructional area, there were no variations in the ratings of the terminal performance objectives and minimal variation in the ratings of the enabling objectives, as reported in Table XI. However, for those enabling objectives that changed in rank, there were several with major changes. For example, Objective 120, "Determine the abilities and personality required for the occupations they choose to investigate," was ranked seventh in 1980 and second in 1983.

There was only one enabling objective that fell below the 2.0 rating. Objective 112, "Recite and spell cluster titles," had a mean of 1.776.

TABLE XI

FIFTEEN CLUSTERS OBJECTIVES RANKED BY MEANS AND COMPARED TO 1930 RANKING

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Terminal Performance Objective					
II.	Analyze occupations which are of personal interest to them.	I	1.936	1	1.873	
123.	Identify the education/training required by occupations they choose to investigate.	1	2.702	1	2.745	
120.	Determine the abilities and personality required for the occupations they choose to investigate.	7	2.607	2	2.709	*
121.	Compare their personal characteristics to those required by occupations they choose to investigate.	5	2.549	2	2.709	*
128.	Describe the advantages and disadvantages of the occupations they choose to investigate.	4	2.578	3	2.691	
125.	Identify the supply and demand for the occupations they choose to investigate.	2	2.627	4	2.673	*
118.	Describe the work involved in the occupations they choose to investigate.	6	2.578	4	2.673	*
124.	Identify the experience needed for the occupations they choose to investigate.	8	2.590	4	2.673	*
113.	Describe the working conditions involved for the occupations they choose to investigate.	3	2.512	5	2.667	*
126.	Identify the opportunities for advancement in the occupations they choose to investigate.	9	2.536	6	2.618	
127.	Identify alternate occupations which require the same skills as the occupations they choose to investigate.	10	2.482	7	2.582	
122.	Identify the earnings received in the occupations they choose to investigate.	11	2.425	8	2.545	
117.	Describe how geographical location affects the occupations they choose to investigate.	12	2.361	9	2.491	
	Terminal Performance Objective					
III.	Demonstrate the ability to obtain information about occupations.	II	2.038	II	2.091	
	Enabling Objectives					
130.	Use *The Occupational Outlook Handbook* to locate occupational information.	1	2.381	1	2.593	
131.	Identify private and professional people and their roles in furnishing occupational information.	2	2.287	2	2.389	
129.	Use *The Dictionary of Occupational Titles* to locate occupational information.	3	2.241	3	2.370	
133.	Explain the types of occupational information furnished by identified private agencies.	4	2.101	4	2.078	

TABLE XI--Continued

Survey Number	Objectives	1980		1983		*
		Rank	Mean	Rank	Mean	
	Terminal Performance Objective					
I.	Use the cluster classification system to locate occupations for investigation.	III	2.962	III	3.000	
	Enabling Objectives					
116.	Make tenative career decisions by listing those clusters which would fit the career life style the student desires.	1	2.296	1	2.564	
115.	List several occupations for each cluster.	5	2.365	2	2.519	*
111.	Demonstrate a general knowledge of each cluster.	3	2.482	3	2.500	
114.	Define each cluster.	2	2.229	4	2.472	*
110.	Explain the reasons for grouping occupations into clusters.	6	2.217	5	2.415	*
113.	Explain the cluster classification of cluster, family, occupation, job and work.	4	2.074	6	2.294	*
112.	Recite and spell cluster titles.	7	1.889	7	1.776	***
	Terminal Performance Objective					
IV.	Locate occupations to survey by choosing one or more clusters for further exploration.	IV	3.513	IV	3.400	
	Enabling Objectives					
132.	Explain the types of occupational information furnished by identified government agencies.	1	2.162	1	2.241	
	Terminal Performance Objective					
V.	Classify occupations into the correct cluster.	V	4.372	V	4.327	

**Below 2.0 rating.

Table XII presents the data from the one-way analysis of variance for each of the instructional area enabling objectives. Four of the five sections showed a significant difference between the total means score rating in 1980 and 1983. "Social aspects of the Socioeconomic Factors" was the only area of enabling objectives that did not differ significantly.

Curriculum Review Section

(Occupational Orientation Teachers' Comments)

The Curriculum Questionnaire was designed to identify teachers' perceptions of what should be taught in Occupational Orientation. In order to evaluate the instructional objectives developed for occupational investigation, teachers were asked to make specific comments for each objective. (For a complete listing of objectives see Appendix D.)

TABLE XII

ONE-WAY ANALYSIS OF VARIANCE FOR INSTRUCTIONAL AREA ENABLING OBJECTIVES

Instructional Area	Sum of Squares	DF	F
Self Appraisal	426.0700	1	.0010
Educational Planning	475.9992	1	.0036
Socioeconomic Factors (Social)	158.1027	1	.2852
Socioeconomic Factors (Economic)	1179.9160	1	.0156
Fifteen Clusters	366.1235	1	.0431

Tables XIII through XVII contain the objectives, both terminal and enabling that were commented on and the remarks. Some of the comments recommended changing the objectives or instructional activities, others were evaluative. If no comments were made, it was noted.

All of the comments were furnished to the Occupational Curriculum Laboratory staff on November 4, 1983. The comments were used by them in creating instructional support and in making a determination of the course content.

Self appraisal.--Table XIII presents the specific comments teachers made in regard to the existing objectives for the instructional area "Self Appraisal." There were comments on three of the four terminal performance objectives. Forty percent of the enabling objectives were not commented on.

Although listed in the space provided, for the first terminal performance objective a comment was made that referred to the entire section: "I feel the concept of self appraisal is great, but the activities in the East Texas Curriculum Guides did not match my students' maturity or age level."

TABLE XIII

OCCUPATIONAL ORIENTATION RESPONDENTS' COMMENTS ON THE INDIVIDUAL SELF APPRAISAL INSTRUCTIONAL AREA OBJECTIVES

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	TERMINAL PERFORMANCE OBJECTIVE
I.	DEMONSTRATE A POSITIVE ATTITUDE TOWARD THEMSELVES AND OTHERS
	• What about building their self-respect by doing a family occupational tree
	• Good
	• Good
	• O.K.
	• Identify or describe advantages of having freedom in their country and the responsibilities involved
	• Vague, hard to measure
	• This is one of the most important areas we teach. There is no other time in their public education that students are exposed to self-awareness in any depth.
	• Learn to accept yourself for what you are and what you can do
	ENABLING OBJECTIVES
1.	No comments
2.	SHOW COOPERATION AND CONSIDERATION FOR FELLOW STUDENTS
	• Show cooperation and consideration for fellow students and teachers
3.	No comments
4.	DESCRIBE "GOOD" MANNERS, BOTH ON THE JOB AND IN SOCIAL RELATIONSHIPS
	• Too vague
	• Should include positive attitude
5.	DEMONSTRATE THE KNOWLEDGE THAT THEY HAVE THE ABILITY TO CHANGE THEMSELVES IF THEY SO DESIRE
	• How?
6.	DESCRIBE HOW ATTITUDES BASED ON PREJUDICE AFFECT THE BEHAVIOR OF OTHER INDIVIDUALS
	• Describe how attitudes based on prejudice affect the behavior of other individuals and ourselves
7.	No comments

BEST COPY AVAILABLE

SURVEY NUMBER | OBJECTIVES AND COMMENTS

ENABLING OBJECTIVES

8. DESCRIBE THE ADVANTAGES AND DISADVANTAGES OF BEING A LEADER AND/OR FOLLOWER

- Delete
- Delete
- Delete
- Too much value and opinion

9. IDENTIFY TRAITS WHICH ARE IMPORTANT TO HAVING A PLEASING PERSONALITY

- Omit
- A pleasing personality by whose standards?

TERMINAL PERFORMANCE OBJECTIVE

II. COMPLETE THE STEPS NECESSARY IN CONDUCTING A SELF APPRAISAL

- All enabling objectives are important
- O.K.
- I feel the concept of self appraisal is great, but the activities in the East Texas Curriculum Guides did not match my students' maturity or age level
- Good
- Identify the steps necessary in conducting a self appraisal and complete some of the steps

ENABLING OBJECTIVES

1. No comments

2. IDENTIFY THEIR PERSONAL ASSETS

- Delete

3. IDENTIFY THEIR OWN VALUES

- Stress values as related to work! This can be a touchy area.

4. No comments

5. IDENTIFY THEIR OWN APTITUDES

- Seems to be more valid when students are older. Done in the ninth grade in our school district.

6. No comments

SURVEY NUMBER	OBJECTIVES AND COMMENTS

TERMINAL PERFORMANCE OBJECTIVE

III. UNDERSTAND THAT PEOPLE CHANGE THEIR CAREERS THROUGHOUT LIFE

ENABLING OBJECTIVES

1. IDENTIFY DIFFERENT MOTIVES FOR WORKING AND CHOOSING VARIOUS TYPES OF EMPLOYMENT

- **Necessity today of preparing for more than one occupation during lifetime due to technological changes**

2. No comments

TERMINAL PERFORMANCE OBJECTIVE

IV. UNDERSTAND THE IMPORTANCE OF DOING WELL ON TESTS

- Briefly---if tests are used. If the students don't "see" it, they will not understand it.
- Least important of all self appraisal terminal performance objectives. Omit due to time factor.
- This can be stressed too much
- O.K.
- Not needed

ENABLING OBJECTIVES

1. DESCRIBE HOW DIFFERENT TYPES OF TESTS SUCH AS INTEREST, APTITUDE, AND ACHIEVEMENT CAN HELP SELECT OCCUPATIONS

- I feel that interest inventories should be given in the eighth grade to help students to plan a tentative schedule for high school. The Self-Directed Search is an excellent tool for use in the eighth grade. It can be used as both an interest and personality measure.

2. No comments

3. IDENTIFY WAYS TO IMPROVE TEST SCORES

- Understand ways to improve test scores
- Delete
- Delete
- I am not sure about this one

BEST COPY AVAILABLE

Educational planning and decision-making.--The comments for the instructional area, "Educational Planning and Decision-Making" are in Table XIV. This section had the least amount of comments for the enabling objectives. Sixty-seven percent received no comments. One terminal performance objective was not commented on. A suggestion for an additional enabling objective was made for the terminal performance objective, "Complete a tentative high school schedule that meets the local school district's requirements for graduation." The recommendation was to "Identify requirements for post-secondary education so students will not have to take non-credit make-up courses in college."

TABLE XIV

OCCUPATIONAL ORIENTATION RESPONDENTS' COMMENTS ON THE INDIVIDUAL EDUCATIONAL PLANNING AND DECISION MAKING INSTRUCTIONAL AREA OBJECTIVES

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	TERMINAL PERFORMANCE OBJECTIVE
I.	EVALUATE THEIR PRESENT PERFORMANCE IN SCHOOL AND RELATE IT TO THEIR FUTURE PLANS FOR EDUCATION/TRAINING ● O.K.
	ENABLING OBJECTIVES
1.	IDENTIFY THE TYPES OF EDUCATION/TRAINING WHICH WOULD HELP THEM ACHIEVE A CAREER GOAL ● Add more information
2.	No comments
3.	No comments
	TERMINAL PERFORMANCE OBJECTIVE
II.	USE A LOGICAL DECISION-MAKING PROCESS TO SOLVE PERSONAL AND CAREER PROBLEMS ● Good

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	ENABLING OBJECTIVES
1.	No comments
2.	APPLY DECISION-MAKING STEPS TO SOLVE PERSONAL PROBLEMS ● Very important to be able to apply a decision-making procedure to other areas of life - transfer of training ● Delete
3.	No comments
	TERMINAL PERFORMANCE OBJECTIVE
III.	USE GOALS TO ACHIEVE PERSONAL AND PROFESSIONAL SUCCESS
	ENABLING OBJECTIVES
1.	No comments
2.	UNDERSTAND THAT PERSONAL GOALS SHOULD BE MATCHED TO CAREER CHOICES FOR A HAPPIER LIFE ● Happier?
3.	No comments
4.	DIFFERENTIATE BETWEEN SHORT, MEDIUM, AND LONG RANGE GOALS ● Needed practice ● Delete
5.	No comments
	TERMINAL PERFORMANCE OBJECTIVE
IV.	COMPLETE A TENTATIVE HIGH SCHOOL SCHEDULE THAT MEETS THE LOCAL SCHOOL DISTRICT'S REQUIREMENTS FOR GRADUATION ● Add to enabling objectives under this category: "Identify requirements for post-secondary education so students will not have to take non-credit make-up courses in college"
	ENABLING OBJECTIVES
1.	DESCRIBE WHAT ELECTIVES WILL HELP THEM IN PREPARING FOR PARTICULAR OCCUPATIONS ● Electives are also very important for leisure time - all work and no play makes Jack (and Jackie) dull!
2.	No comments
3.	No comments
4.	No comments

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	TERMINAL PERFORMANCE OBJECTIVE
V.	DESCRIBE THE EDUCATION/TRAINING POSSIBLE TO THEM AFTER LEAVING HIGH SCHOOL ● All right ● All necessary
	ENABLING OBJECTIVES
1.	EXPLAIN WHY A WORKER WITH MORE EDUCATION/TRAINING AND EXPERIENCE WILL QUALIFY FOR A HIGHER LEVEL OCCUPATION WITHIN A CAREER FIELD ● Delete
2.	No comments
3.	No comments
4.	No comments
5.	No comments
6.	IDENTIFY SOURCES OF FINANCING FOR CONTINUED EDUCATION/TRAINING ● If time permits

Social aspects of socioeconomic factors.--Table XV contains the specific comments made by teachers on the "Social Aspects of Socioeconomic Factors" instructional area. Sixteen or 52 percent of the enabling objectives received comments. All of the terminal performance objectives were commented on. Two terminal performance objectives, "Use the telephone correctly" and "Understand the role of unions and professional organizations" and their corresponding enabling objectives received critical comments.

TABLE XV

OCCUPATIONAL ORIENTATION RESPONDENTS' COMMENTS ON THE INDIVIDUAL SOCIAL ASPECTS OF SOCIO-ECONOMIC FACTORS INSTRUCTIONAL AREA OBJECTIVES

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	TERMINAL PERFORMANCE OBJECTIVE
I.	DESCRIBE THOSE THINGS THAT CONTRIBUTE TO BEING SUCCESSFUL ON THE JOB ● O.K. ● No matter what job one does, the objectives listed under this category are necessary for success ● Identify going beyond the call of duty
	ENABLING OBJECTIVES
1.	ACCEPT PERSONAL RESPONSIBILITY ● How measured?
2.	No comments
3.	No comments
4.	No comments
5.	IDENTIFY THE CAUSES OF FAILURE ON THE JOB ● Make sure they know these are only a few
6.	No comments
7.	UNDERSTAND THE IMPORTANCE OF BEING CONSISTENT AND PERSISTENT ● Understand the importance of being consistent and persistent and how it may cause you problems
8.	No comments
9.	No comments
10.	IDENTIFY GOOD GROOMING HABITS ● Important (discuss overdressing also) ● A must
11.	No comments
12.	No comments
13.	No comments
14.	DESCRIBE THE MERITS OF GOOD GROOMING ● Delete ● Delete

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	ENABLING OBJECTIVES
15.	DESCRIBE HOW WORKERS RECEIVE JOB PROMOTIONS ● Theory only or in real life?
16.	EXPLAIN PROPER PROCEDURES TO USE IN RESIGNING FROM A JOB ● Delete
	TERMINAL PERFORMANCE OBJECTIVE
II.	GIVE AND RECEIVE INSTRUCTIONS ● Very important ● O.K. ● Activities? ● Learn to ask questions
	ENABLING OBJECTIVES
1.	No comments
2.	No comments
3.	DEMONSTRATE GOOD LISTENING SKILLS ● A tape can be used. This is very important. We need a game made up for this.
4.	No comments
	TERMINAL PERFORMANCE OBJECTIVE
III.	IDENTIFY THE FACTORS THAT DETERMINE LIFESTYLE ● If you have time ● One of the most important concepts taught ● O.K. ● Understand the result/cost of not being prepared to provide for own financial needs (welfare, prison). Understand that they are the government; their taxes pay for everything.

SURVEY NUMBER	OBJECTIVES AND COMMENTS

ENABLING OBJECTIVES

1. No comments

2. RELATE HOW MUCH IT COSTS TO MAINTAIN A STANDARD OF LIVING

- Delete

3. No comments

TERMINAL PERFORMANCE OBJECTIVE

IV. DESCRIBE THE UNIQUE ENVIRONMENTAL, SOCIAL AND ECONOMIC FACTORS OF THEIR COMMUNITY AND SURROUNDING AREAS

- O.K.

ENABLING OBJECTIVES

1. DETERMINE THE LABOR DEMANDS OF THEIR COMMUNITY

- More detailed breakdown of industry/business needs and salaries of the area
- Identify specific job tasks in their community
- In a small town, they know what is available

2. IDENTIFY VARIOUS CIVIC ORGANIZATIONS AND DESCRIBE HOW THEY CONTRIBUTE TO IMPROVING THEIR COMMUNITIES

- Explain and show outlook --- rest should be omitted
- Delete
- Delete

TERMINAL PERFORMANCE OBJECTIVE

V. USE THE TELEPHONE CORRECTLY

- Omit - busy work
- Proper use of the telephone directory
- Delete
- Delete
- Do not teach any of these skills

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	ENABLING OBJECTIVES
1.	No comments
2.	DEMONSTRATE THE ABILITY TO ANSWER THE PHONE PROPERLY ● Emphasize voice quality, volume, etc. and use of different telephone equipment ● Not too much time should be spent here
3.	PLACE A LONG DISTANCE CALL ● Not related to purpose of occupational investigation ● Delete - no need to use class time for this when adequate instruction is readily available in the telephone directory ● Delete ● Not too much time should be spent here
	TERMINAL PERFORMANCE OBJECTIVE
VI.	UNDERSTAND THE ROLE OF UNIONS AND PROFESSIONAL ORGANIZATIONS ● If time permits ● From whose viewpoint? ● O.K. ● Maybe ● Very few unions down here
	ENABLING OBJECTIVES
1.	DESCRIBE APPRENTICESHIP ● Important
2.	IDENTIFY THE ADVANTAGES AND DISADVANTAGES OF MEMBERSHIP IN UNIONS AND PROFESSIONAL ORGANIZATIONS ● Omit ● Skip
3.	EXPLAIN THE PURPOSES OF PROFESSIONAL ORGANIZATIONS AND UNIONS ● Skip

Economic aspects of socioeconomic factors.--The comments for the objectives in the "Economic Aspects of Socioeconomic Factors" are located in Table XVI. All terminal performance objectives were commented on. "Demonstrate the skills necessary to practice personal money management" was noted as being more useful to older students and it was suggested that it be taught only if time permitted.

Seventy-five percent or twenty-seven enabling objectives received one or more comments. Three of the enabling objectives, "Identify different types of financial interest," "Fill out an income tax W-4 form," and "Apply for an income tax refund" received multiple comments that they should be dropped or were not necessary at this level.

TABLE XVI

OCCUPATIONAL ORIENTATION RESPONDENTS' COMMENTS ON THE INDIVIDUAL ECONOMIC ASPECTS OF SOCIO-ECONOMIC FACTORS INSTRUCTIONAL AREA OBJECTIVES

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	TERMINAL PERFORMANCE OBJECTIVE
I.	DEMONSTRATE THE ABILITY TO USE IDENTIFIED METHODS OF FINDING EMPLOYMENT ● Good ● Important ● Use telephone to apply for a job ● Good stuff
	ENABLING OBJECTIVES
1.	WRITE A LETTER REQUESTING A JOB APPLICATION ● Maybe
2.	IDENTIFY PEOPLE TO CONTACT WHEN LOOKING FOR EMPLOYMENT ● Is important
3.	UNDERSTAND AND USE THE CLASSIFIED AD SECTION ● Not terribly helpful
4.	READ CLASSIFIED AD ABBREVIATIONS ● Semi-helpful

SURVEY NUMBER | OBJECTIVES AND COMMENTS

ENABLING OBJECTIVES

5. WRITE A LETTER USING A STANDARD BUSINESS FORM

- Delete
- Delete

6. USE RESOURCES PROVIDED BY THE TEXAS EMPLOYMENT COMMISSION

- Do not find time to include

7. No comments

8. EXPLAIN HOW PRIVATE EMPLOYMENT AGENCIES FIND OCCUPATIONS FOR INDIVIDUALS

- Students need to understand that private employment agencies are a very poor source of jobs. They can help, but very seldom do help!
- Delete

TERMINAL PERFORMANCE OBJECTIVE

II. DEMONSTRATE JOB ACQUISITION SKILLS

- Very important and demonstrated usefulness
- Good
- O.K
- Basic things needed should be taught first, clusters second

ENABLING OBJECTIVES

1. No comments

2. No comments

3. COMPOSE A PERSONAL RESUME

- Maybe

TERMINAL PERFORMANCE OBJECTIVE

III. DEMONSTRATE THE SKILLS NECESSARY TO PRACTICE PERSONAL MONEY MANAGEMENT

- Useful if time permits
- I never have time for this. Many of my students are seventh graders. Though we touch on the area, I feel it is better left until they are a little older.
- Good
- If time permits - it is important, but there are others more pertinent to occupational investigation
- O.K.
- Only if you have a year program

SURVEY NUMBER | OBJECTIVES AND COMMENTS

ENABLING OBJECTIVES

1. DEMONSTRATE THE ABILITY TO PLAN A BUDGET

- We really work on this
- Omit
- Delete
- Delete

2. DESCRIBE HOW CREDIT WORKS

- Covered by speakers
- Delete

3. DEMONSTRATE A REALISTIC KNOWLEDGE OF THE VALUE OF MONEY AND WHAT IT BRINGS

- We really work on this
- Realistic?
- Identify the types of expenses (fixed or flexible)

4. DEMONSTRATE THE SKILLS NECESSARY FOR MAINTAINING A CHECKING ACCOUNT

- Can be used as busy work
- Omit

5. DEMONSTRATE SKILLS NECESSARY FOR MAINTAINING A SAVINGS ACCOUNT

- Delete - too time consuming with time available
- Omit

6. IDENTIFY DIFFERENT TYPES OF FINANCIAL INTEREST

- Omit. This changes too fast. Tell them where to find the information.
- Delete - too time consuming with time available
- Delete
- Necessary?
- Omit

TERMINAL PERFORMANCE OBJECTIVE

IV. PERFORM GOVERNMENT REGULATED WORK TASKS, SUCH AS APPLYING FOR A SOCIAL SECURITY CARD

- O.K.

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	ENABLING OBJECTIVES
1.	COMPLETE A REQUEST FORM FOR A SOCIAL SECURITY CARD
	● Omit
2.	No comments
3.	DESCRIBE THE PURPOSE AND APPLICATION OF EQUAL EMPLOYMENT OPPORTUNITY
	● Not necessary at this level
4.	FILL OUT AN INCOME TAX W-4 FORM
	● Not necessary at this level
	● Do not have time - done in Bookkeeping
	● Delete
	● Delete
	● Delete
	● Delete
5.	No comments
6.	EXPLAIN BENEFITS RECEIVED FROM SOCIAL SECURITY
	● Not necessary at this level
	● Omit
	● Omit
7.	APPLY FOR AN INCOME TAX REFUND
	● Not necessary at this level
	● Do not have time - done in Bookkeeping
	● Delete
	● Omit
	● Delete
	● Delete
	● Omit
	TERMINAL PERFORMANCE OBJECTIVE
V.	DEVELOP A BASIC UNDERSTANDING OF THE ECONOMY
	● If time permits
	● O.F.
	● If time permits

SURVEY NUMBER	OBJECTIVES AND COMMENTS

ENABLING OBJECTIVES

1. No comments

2. RELATE COST OF LIVING TO INFLATION

- Important
- Omit
- Delete

3. No comments

4. DEFINE INFLATION

- Omit
- Delete
- This is part of our program

5. No comments

6. IDENTIFY THE CHARACTERISTICS OF A FREE ENTERPRISE ECONOMY

- How can a teacher who has never been in the free enterprise system and does not understand it him/herself, do this?
- Information is available in other courses - delete
- Define a socialistic or communistic economy

TERMINAL PERFORMANCE OBJECTIVE

VI. DEMONSTRATE A KNOWLEDGE OF HOW EMPLOYEES ARE PAID

- Good
- O.K.
- All enabling objectives under this category are important
- Compute overtime

ENABLING OBJECTIVES

1. DIFFERENTIATE BETWEEN GROSS AND NET PAY

- Delete

2. DESCRIBE ON-THE-JOB WORKER BENEFITS

- Change to "Describe fringe benefits"
- Delete

3. DIFFERENTIATE BETWEEN VOLUNTARY AND INVOLUNTARY DEDUCTIONS

- Delete

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	ENABLING OBJECTIVES
4.	UNDERSTAND THE NECESSITY OF TIME CLOCKS AND HOW THEY ARE USED
	• Use a card or check-in procedure in class
5.	No comments
6.	COMPUTE PAYROLL DEDUCTIONS
	• Work with Math department
	• Omit

Fifteen clusters.--The comments for the "Fifteen Clusters" instructional area objectives are in Table XVII. All four terminal performance objectives were commented on. The terminal performance objective, "Locate occupations to survey by choosing one or more clusters for further exploration," received two comments to delete it. The one corresponding enabling objective received one comment and that was to delete it.

Three enabling objectives, "Explain the cluster classification of cluster, job family, occupation, job and work," "Define each cluster" and "Recite and spell cluster titles" received negative comments and recommendations were made to drop all three. All of these enabling objectives were under the terminal performance objective: "Use the cluster classification system to locate occupations for investigation." The value of it, too, was questioned. Overall, 48 percent of the enabling objectives received comments.

A need for additional sources of information under the terminal performance objective, "Demonstrate the ability to obtain information about occupations" was noted. The need was identified for handicapped students in special education classes.

TABLE XVII

OCCUPATIONAL ORIENTATION RESPONDENTS' COMMENTS ON THE INDIVIDUAL FIFTEEN CLUSTERS INSTRUCTIONAL AREA OBJECTIVES

SURVEY NUMBER	OBJECTIVES AND COMMENTS
	TERMINAL PERFORMANCE OBJECTIVE
I.	ANALYZE OCCUPATIONS WHICH ARE OF PERSONAL INTEREST TO THEM ● O.K. ● Retain as is ● O.K. ● Change wording of objective to: "Analyze occupations" ● Keep all enabling objectives under this category
	ENABLING OBJECTIVES
1.	IDENTIFY THE EDUCATION/TRAINING REQUIRED BY OCCUPATIONS THEY CHOOSE TO INVESTIGATE ● Identify the education/training required by certain chosen occupations
2.	No comments
3.	No comments
4.	No comments
5.	No comments
6.	No comments
7.	No comments
8.	No comments
9.	No comments
10.	IDENTIFY THE EARNINGS RECEIVED IN THE OCCUPATIONS THEY CHOOSE TO INVESTIGATE ● Not necessary except for comparison - actual earnings change so much
11.	No comments

SURVEY NUMBER	OBJECTIVES AND COMMENTS

TERMINAL PERFORMANCE OBJECTIVE

II. DEMONSTRATE THE ABILITY TO OBTAIN INFORMATION ABOUT OCCUPATIONS

- I feel sources for Vocational Education for the Handicapped should be included. I teach occupational investigation to special education students and I have had success with the "Seek Kit", "Occu-File" and other informational sources.
- Definitely
- Delete

ENABLING OBJECTIVES

1. USE THE OCCUPATIONAL OUTLOOK HANDBOOK TO LOCATE OCCUPATIONAL INFORMATION

- Important resource

2. No comments

3. USE THE DICTIONARY OF OCCUPATIONAL TITLES TO LOCATE OCCUPATIONAL INFORMATION

- Too hard for the eighth grade, but not necessary if OOH used
- Important resource
- Too difficult to use, even for me!

4. EXPLAIN THE TYPES OF OCCUPATIONAL INFORMATION FURNISHED BY IDENTIFIED GOVERNMENT AGENCIES

- Omit

TERMINAL PERFORMANCE OBJECTIVE

III. USE THE CLUSTER CLASSIFICATION SYSTEM TO LOCATE OCCUPATIONS FOR INVESTIGATION

- Am still not convinced of value of clusters. Know this is heresy -- I use them because it is expected.

ENABLING OBJECTIVES

1. No comments

2. EXPLAIN THE REASONS FOR GROUPING OCCUPATIONS INTO CLUSTERS

- In five minutes or less
- Delete

3. No comments

4. LIST SEVERAL OCCUPATIONS FOR EACH CLUSTER

- List five occupations for each cluster

SURVEY NUMBER | OBJECTIVES AND COMMENTS

ENABLING OBJECTIVES

5. EXPLAIN THE CLUSTER CLASSIFICATION OF CLUSTER, JOB FAMILY, OCCUPATION, JOB AND WORK

- Bores students
- Delete
- Delete
- Delete

6. DEFINE EACH CLUSTER

- Bores students
- Delete

7. RECITE AND SPELL CLUSTER TITLES

- Bores students
- Delete
- Not necessary to recite or spell
- Nice to know for information, but some students get involved with this to the elimination of more pertinent information
- Delete

TERMINAL PERFORMANCE OBJECTIVE

IV. LOCATE OCCUPATIONS TO SURVEY BY CHOOSING ONE OR MORE CLUSTERS FOR FURTHER EXPLORATION

- Delete
- Omit objective

ENABLING OBJECTIVES

1. EXPLAIN THE TYPES OF OCCUPATIONAL INFORMATION FURNISHED BY IDENTIFIED PRIVATE AGENCIES

- Delete

Needs Assessment

To provide direction for East Texas State University's Occupational Curriculum Laboratory, a needs assessment instrument was administered to Occupational Orientation teachers. Three areas were surveyed: classroom management, instructional materials and references for writing curriculum.

Teachers were asked to determine two factors for each of the twenty-five items. The first factor was "Quantity" which was defined on the survey as "How much of the following do you have to teach Occupational Orientation?" The second factor was "Importance" which was defined as "How important are the following items to teach Occupational Orientation?"

To determine the relative need for the individual items, the variation between the respondents' perceived designation of quantity and importance was determined and a mean was calculated. Table XVIII presents the mean scores, rank by area and rank for all twenty-five items (page 67).

There were five items with a mean difference greater than 1.0. The greatest mean difference was for item number sixteen, "Computer applications for use in Occupational Orientation." The least need was for worksheets, item 12. This should not be interpreted to mean that worksheets are not of value, but as a sign that the need teachers have for instructional worksheets has been nearly met. For all twenty-five items there was some level of need. In each case the importance of the item exceeded the quantity.

Request for Proposal R-10 called for all materials of the project to include items addressing the following: (1) suggestions for modifying materials for use with handicapped students; (2) suggestions for promoting equal access; (3) suggestions for computer applications; and (4) suggestions for adapting materials for use with students of limited English proficiency Of those four areas, all but one--Information on equal access to all program areas--had a mean difference of .928 or higher.

Project Advisory Committee Recommendations for Curriculum Development

The Project Advisory Committee was made up of Occupational Orientation teachers and representatives from business/industry. For the complete text of their input see Appendix A. Their input is also included in the recommendations beginning on page 70.

TABLE XVIII

INDIVIDUAL AREA AND OVER-ALL LISTING OF NEED ASSESSMENT ITEMS RANKED BY MEAN DIFFERENCES

Survey Item Number	Area Item	Rank		Mean Difference
		Area	Over-All	
	Classroom Management			
1.	Suggested floor plans for classroom organization.	7	18	.525
2.	Suggested equipment for the classroom.	6	16	.649
3.	Materials to increase the effective use of advisory committees.	8	20	.488
4.	Bulletinboard ideas.	4	13	.717
5.	Information on equal access to all program areas.	9	21	.477
6.	Information on teaching the handicapped and disadvantaged.	2	9	.928
7.	Information on teaching limited English proficiency students.	1	3	1.499*
8.	Methods for maintaining classroom discipline.	3	11	.850
9.	Instructional strategies.	5	14	.711
	Instructional Materials			
10.	Textbooks.	3	5	1.195*
11.	Workbooks.	2	4	1.483*
12.	Worksheets.	8	24	.262
13.	Transparencies.	5	17	.624
14.	Reference materials.	5	17	.624
15.	Educational games.	6	19	.509
16.	Computer applications for use in occupational orientation.	1	1	2.333*
17.	Slide/tape presentations.	4	7	.997
18.	Filmstrips.	7	22	.473

TABLE XVIII--Continued

Survey Item Number	Area Item	Rank		Mean Difference
		Area	Over-All	
	References for Writing Curriculum			
19.	Description of general topics that should be taught in the Occupational Orientation Class.	7	23	.466
20.	Identified competencies in the subject matter for students to learn.	6	15	.657
21.	Instructional outlines listing specific student learner outcomes.	3	8	.936
22.	Curriculum outlines listing measurable behavioral objectives.	5	12	.810
23.	Complete curricula listing student learner outcomes, teaching methods and resources.	4	10	.849
24.	Complete instructional modules for individual exploration experiences.	2	6	1.135*
25.	Pre/Post tests to measure attainment of identified student learner outcomes.	1	2	1.625*

*Mean difference 1.0 or more.

Summary

To evaluate Occupational Orientation curriculum two major aspects were investigated: existing curricular/instructional materials and teachers' perceived needs for curricular/instructional materials. Two survey instruments with four total sections were used to obtain the necessary data. Those four sections included a demographic section, curriculum content survey, curriculum review section and a needs assessment contained in the second survey. Based on the fourteen research questions, the following summarizes the research conducted on the curriculum evaluation.

The first five research questions pertaining to the evaluation of existing curriculum dealt with the differences between the rankings of the terminal performance objectives in 1980 and 1983. The research reported in this section found that there were no differences between the terminal performance objective order for the instructional areas "Self Appraisal," "Social Aspects of Socioeconomic Factors," and "Fifteen Clusters" as covered in research questions one, three, and five. There were variations in the terminal performance objectives for the instructional areas, "Economic Aspects of Socioeconomic Factors," and "Educational Planning and Decision Making." Two terminal performance objectives out of five changed rank order in the "Educational Planning" instructional area.

The terminal performance objectives for the instructional area "Economic Aspects of Socioeconomic Factors" had the greatest amount of variation with four of the six objectives changing ranks. The first and second ranks were reversed from 1980 to 1983. The same happened for the third and fourth ranks.

There was a significant difference in the ratings of the enabling objectives by Occupational Orientation teachers in 1980 and 1983 for four of the five instructional areas. Therefore, research questions six, seven, eight and ten are answered in the affirmative. In this study, Occupational Orientation teachers in 1983 consistently rated the enabling objectives higher. They also rated the "Economic Aspects of Socioeconomic Factors" enabling objectives higher, but not significantly so. Therefore, research question nine would be answered negatively. There was no significant difference in the mean scores for the enabling objectives in this instructional area.

These comments provided the information needed for research question eleven: "What changes need to be made in the existing curriculum outline for occupational investigation to improve instruction for Occupational Orientation programs?" They were forwarded to the East Texas State Occupational Curriculum Laboratory to provide teachers' input into the format and content of the new curriculum materials being developed.

Research question twelve pertained to the teaching/professional needs of teachers in the area of classroom management. Information on teaching limited English proficiency students was the highest ranked need in that section and third in the over-all ranking. There were no other items in that section that fell in the five highest ranked for all twenty-five items.

Need for instructional materials was covered in research question thirteen. This section contained three items with a mean difference greater than 1.0. The highest ranked need for the area and for all items was "Computer applications for use in Occupational Orientation." Needs were also expressed for workbooks, textbooks, and slide/tape presentations.

References for writing curriculum was the topic of research question fourteen. The second highest need was expressed in this section. It was for pre/post tests to measure attainment of identified student learner outcomes. Another high ranked need with a mean difference greater than 1.0 was for complete instructional modules for individual exploration experiences.

The Occupational Orientation teachers on the Project Advisory Committee expressed concerns about the diversification of both occupational investigation and occupational exploration programs at the local level. Adapting existing materials to variations in course length, grade level, and student populations has been a problem.

Business and industry representatives advised that specific occupational information on many occupations in computer technology becomes obsolete rapidly and predicting future occupations would be nearly impossible. They did urge that the importance of communications skills, both verbal and written, be emphasized and human relations skills be stressed.

Recommendations

Although curriculum and instructional materials developed for Occupational Orientation were not "out-dated," they do require modification. Specific recommendations in the form of teacher input from the Project Advisory Committee and data collection from the field were given to East Texas State Occupational Curriculum Laboratory staff members. They in turn used the recommendations to develop new curriculum materials for Occupational Orientation.

The following recommendations are made for consideration for future Occupational Orientation program development.

Future curriculum development for occupational orientation should.

1. follow federal legislation priorities and develop materials for teaching handicapped and disadvantaged and students with limited English proficiency;
2. be structured, using formats such as workbooks, textbooks, instructional outlines listing specific student-learner outcomes, and pre/post tests to measure the attainment of student-learner outcomes;
3. develop and/or identify software for computer aided instruction in Occupational Orientation;

4. approach curriculum development for each phase of Occupational Orientation, investigation and exploration separately, they are two separate and distinct courses and should be viewed as such;
5. identify a goal or purpose for occupational investigation and occupational exploration, reinforcing their distinct difference in approach;
6. not try to create information on specific occupations in the field of computer technology because of the rapid change and impossibility of predicting future occupation descriptions;
7. approach computer technology from the global aspect of computer application being present in nearly all occupations in the future;
8. contain units on the importance of communication skills and human relations skills;
9. develop the same student-learner outcomes and adapt instructional activities for at least three levels: (a) beginning, (b) intermediate, and (c) advanced, to meet the needs of variations in grades seven through twelve and student populations, special education to gifted;
10. be adaptable to variation in course lengths--eight weeks to a full school year;
11. be used in the teacher education programs to prepare Occupational Orientation teachers; and
12. for the purposes of program evaluation, mandate a percentage of the curricula for occupational investigation and occupational exploration for each unit in the State.

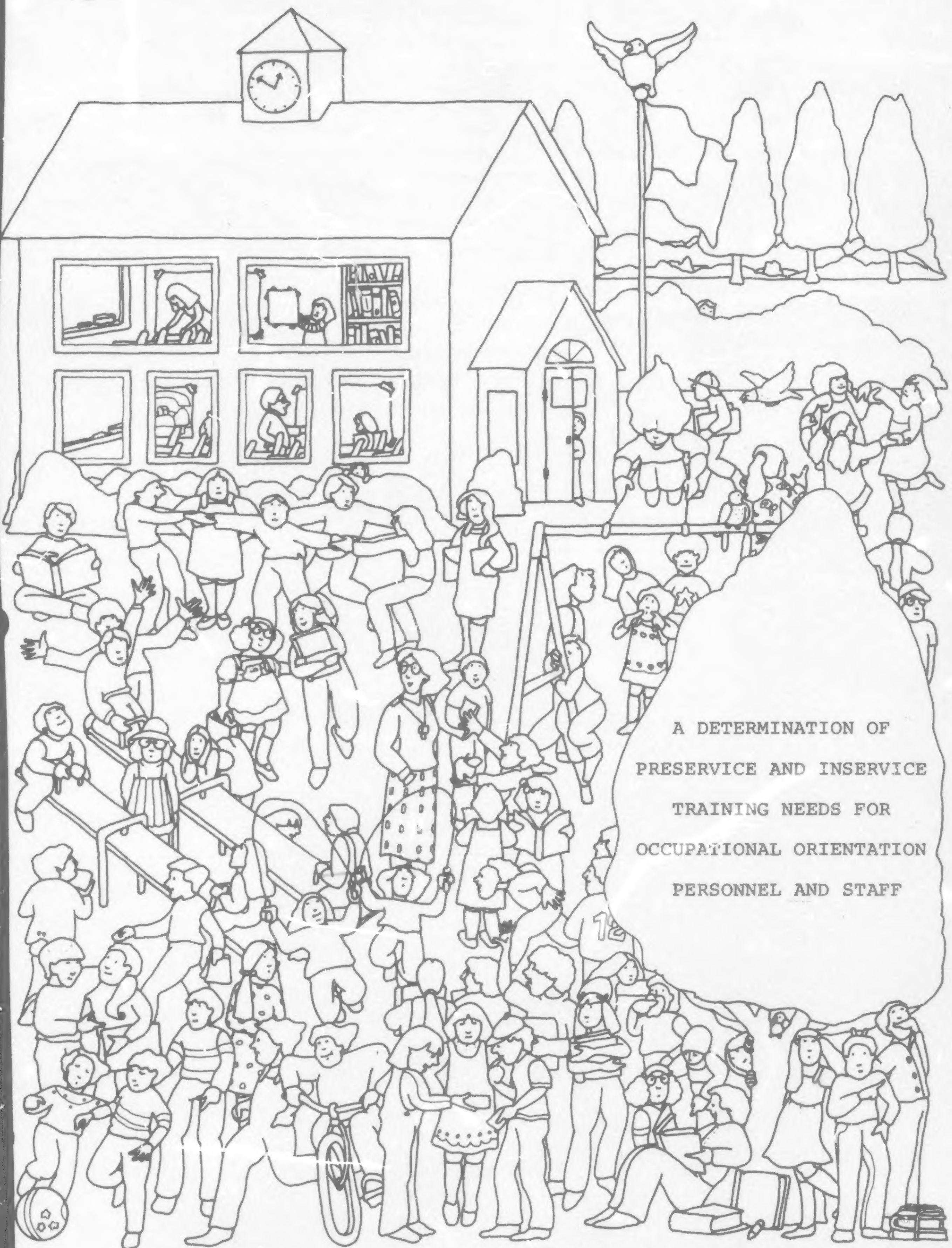
Bibliography

1. Hollenback, Kathryn, An Assessment of Occupational Exploration Programs and Resource Materials, unpublished materials, Texas Education Agency, Austin, Texas, 1980.

2. Hollenback, Kathryn, An Assessment of Occupational Orientation Investigation Activities and Course Content at the Local Level to Determine Its Effectiveness, unpublished materials, Texas Education Agency, Austin, Texas, 1980.

3. Nie, Norman H. et al., SPSS: Statistical Package for the Social Sciences, 2nd ed., New York, McGraw-Hill Book Company, 1975.

4. Research Coordinating Unit, "Request for Proposals," A Manual, Texas Education Agency, Austin, Texas, 1983.



A DETERMINATION OF PRESERVICE AND INSERVICE TRAINING NEEDS FOR OCCUPATIONAL ORIENTATION PERSONNEL AND STAFF

III. EVALUATION OF TEACHER EDUCATION

PART III

Introduction

Teachers of Occupational Orientation must meet three basic requirements in order to be certified. They must have a bachelor's degree, two years recent work experience from gainful employment in an occupation other than education, and must complete twelve university credit hours of course work. Occupational exploration teachers must have their work experience in the same career area in which they are teaching, i.e. business and office, construction, marketing.

Seven institutions of higher education have offered certification course work for Occupational Orientation in Texas. The institutions are as follows:

East Texas State University
North Texas State University
Sam Houston State University
Southwest Texas State University
Prairie View A & M University
Texas A & M University
University of Houston

Currently, the first four are receiving federal personnel development funds to offer certification courses specifically for Occupational Orientation certification programs. However, course work taken at other universities can be substituted at the discretion of the Coordinator of Vocational Guidance and Counseling Division, Texas Education Agency.

Nine of the twelve certification hours are the same for all teachers of Occupational Orientation. However, occupational investigation teachers take three credit hours in the area of occupational information and occupational exploration teachers take three credit hours in vocational shop and laboratory management. Although the specific course titles vary from university to university they are similar to the following titles which were used in this study to designate certification courses:

- Planning and Organizing Programs of Vocational Guidance
- Occupational and Vocational Education Information
- History and Principles of Vocational Education
- Methods for Teaching Vocational Subjects
- Vocational Shop and Laboratory Management

Problem of the Study

During the 1979-1980 school year, Dr. David Qualls developed and administered a survey to determine how Occupational Orientation teachers perceived their certification course work (2). Since that time, many changes have taken place in the delivery of both preservice and inservice training to Occupational Orientation teachers. The problem of this study was to identify any changes in the perceptions held by Occupational Orientation teachers toward their teacher training.

Statement of the Purpose

The purposes of the research reported in this section were to (1) identify perservice and inservice training needs of Occupational Orientation personnel, (2) determine if Occupational Orientation teachers' perceptions of the Occupational Orientation teacher training/certification courses have changed since 1980, and (3) make recommendations to improve the quality of Occupational Orientation teacher education activities.

Research Questions

The basic questions answered by the research reported in this section are as follows:

1. What is the relative usefulness of each of the certification courses, as perceived by Occupational Orientation teachers, in preparing them to plan and organize the Occupational Orientation program in their local independent school districts?

2. Is there a statistically significant difference in the perceived usefulness of required certification courses between Occupational Orientation teachers in 1980 and 1983?

3. What are Occupational Orientation teachers' perceptions of how well required certification courses were organized, developed, and presented?

4. Is there a statistically significant difference in the perceptual evaluations of required certification courses between Occupational Orientation teachers in 1980 and 1983?

5. Are there any differences in the problems Occupational Orientation teachers encountered in completing certification requirements at various higher education institutions in 1980 and 1983?

6. Are there any differences in suggested changes in the teacher certifica[illegible]rocess at the Texas Education Agency approved teacher training institutions [illegible] by Occupational Orientation teachers in 1980 and 1983?

Instrumentation

The questionnaire used in this part of the study had four purposes: (1) To obtain demographic information, (2) To gain curriculum and instruction input for the Occupational Curriculum Laboratory at East Texas State University, (3) To partially replicate a study completed by David Qualls in 1980 on Occupational Orientation Teachers' perceptions of teacher education/training, and (4) To solicit current information on the teacher education/training system in the State. A portion of the questionnaire used was originally developed

> . . . to gather information concerning teachers' perceptions of the Occupational Orientation teacher training/certification program. The questionnaire was designed to provide information concerning Occupational Orientation teachers' perceptions of the usefulness of the required certification courses in planning, organizing, and implementing the program in their schools, and to determine the need for possible improvements in the courses so that they better meet the needs of these teachers (2, p. 88).

The content of this part of the questionnaire was originally determined by a panel of experts composed of teacher educators and the Chief Consultant of Occupational Orientation, Department of Occupational Education and Technology, Texas Education Agency.

The survey instrument was divided into five broad areas: (1) items to determine the usefulness of certification courses in planning, organizing, and implementing the program, (2) items to determine how well these courses were organized, (3) items to determine what problems Occupational Orientation teachers had encountered while being certified, (4) items to determine the respondents' perceptions of the roles of the teacher educators, and (5) demographic data. The items used to determine how well the certification courses were organized were subdivided into four areas: (a) how relevant were the textbooks used in these courses, (b) how organized, current, and relevant was the course content of each of these courses, (c) how clear were the stated objectives for each course, and (d) how appropriate were the instructional materials and resources for each course (2, p. 89).

For the purpose of this research modifications were made to the original questionnaire. The University of Houston's name was added to the list of certifying institutions. A question originally included to determine the usefulness of certification courses in the process of implementing Occupational Orientation programs was not included. It was deleted because currently most Occupational Orientation programs are established and few teachers are responsible for implementing new programs. Also the stem "To what extent has each course been useful to you in the area of" was added to the statement instead of being printed separately. Other than minor printing and format changes this portion of the questionnaire remained virtually the same as the original to allow for direct comparisons.

To obtain comments about the teacher certification classes, additional open-ended questions were added. These questions were designed to identify specific strengths and weaknesses in certification courses to facilitate teacher education improvement.

Data Analysis

Data were transferred to computer coding forms for data entry. The data were analyzed at the North Texas State University Computer Center. Using the Statistical Package for Social Sciences, SPSS (1) developed at McGill University, frequencies, percentages and chi-square procedures were completed to test the data when appropriate.

Because a major portion of the study replicates previous research, the original data are presented when appropriate for comparison.

Profile of the Respondents

Occupational Orientation teachers who attended the Vocational Guidance Personnel Workshop held July 31 through August 3, 1983 in Austin, Texas were asked to complete an Occupational Orientation Teacher-Education Certification survey if they had completed at least one teacher certification course.

Of the 125 Occupational Orientation teachers who attended the Conference, 59 or 47.2 percent completed and returned their questionnaires. It was not known how many of the total number of teachers attending the Conference met the criterion of having completed one certification course. However, because so many beginning teachers attend inservice, it is assumed that the percentage of respondents meeting all criteria and returning surveys was over 70 percent.

Demographic and historical data for the respondents who participated in the study are presented in Table XIX through XXIII.

TABLE XIX

SEX OF RESPONDENTS

Sex	Frequency	Percentage
Male	24	40.7
Female	35	59.3
Total	59	100.0

TABLE XX

ETHNICITY OF RESPONDENTS

Ethnic Group	Frequency	Percentage
Hispanic	10	16.9
Black	5	8.5
White	44	74.6
Total	59	100.0

The majority of the respondents were white males. Gender was equally represented in the original study with 52.4 percent being female. In the original study 16.9 percent of the respondents were black, 3.6 percent were hispanic and 78.3 percent were white.

TABLE XXI

TEACHING POSITION OF RESPONDENTS

Position	Frequency	Percentage
Full-Time OI	45	76.3
Part-Time OI	7	11.9
Full-Time OE	3	5.0
Other*	4	6.8
Total	59	100.0

*Persons in the "Other" category were included because they had been teachers of Occupational Orientation at one time.

Of those responding, 59 percent had taught three years or less. None of these respondents would have been included in the original survey.

Table XXIV presents the frequencies and percentages of responses in answer to the question: "At which university did you complete the required certification courses?" The high percentage of missing data is due to respondents who had not finished all course work and in the variation in certification requirements for occupational investigation and occupational exploration.

TABLE XXII

LENGTH OF TIME OCCUPATIONAL ORIENTATION PROGRAM HAS EXISTED IN RESPONDENTS' SCHOOL DISTRICT

Years	Frequency	Relative Percentage	Adjusted Percentage
Less than 1	1	1.7	1.8
1 to 2	8	13.6	14.0
3 to 5	16	27.1	28.1
6 to 7	8	13.6	14.0
7 to 9	9	15.3	15.8
10 +	15	25.3	26.3
Missing	2	3.4	. . .
Total	59	100.0	100.0

TABLE XXIII

RESPONDENTS' EXPERIENCE TEACHING OCCUPATIONAL ORIENTATION

Years	Frequency	Relative Percentage	Adjusted Percentage
Less than 1	4	6.8	7.1
1 to 3	29	49.2	51.9
4 to 6	14	23.7	25.0
7 to 9	4	6.8	7.1
10 +	5	8.4	8.9
Missing	3	5.1	. . .
Total	59	100.0	100.0

With the exception of "Organization and Management of Vocational-Technical Laboratory Shop Programs," North Texas State University trained most of the respondents and Southwest Texas State University was next. The data from the original study were not available for comparison. The large percentages of missing data are attributable to respondents not having completed all certification classes and to the two courses that are not required for both phases of Occupational Orientation.

TABLE XXIV
LOCATION OF RESPONDENTS CERTIFICATION WORK

University	Plan Program of Voc.Guidance		OCC & VOC Information Systems		History and Principles		Methods and Media		Managing VOC-TECH Shops & Labs	
	F	%	F	%	F	%	F	%	F	%
ETSU	7	11.9	4	6.8	6	10.2	8	13.6	2	3.4
Sam Houston	3	5.1	6	10.2	5	8.5	4	6.8	1	1.7
Prairie View	3	5.1	3	5.1	4	6.8	1	1.7	2	3.4
A & M	1	1.7	1	1.7	5	8.5	1	1.7	0	0.0
NTSU	23	39.0	17	28.8	17	28.8	21	25.6	3	5.1
Southwest	12	20.3	11	18.6	14	23.7	16	27.1	7	11.9
U of H	1	1.7	1	1.7	1	1.7	2	3.4	1	1.7
Other	1	1.7	4	6.8	1	1.7	2	3.4	2	3.4
Missing*	8	13.6	12	20.3	6	10.2	4	6.8	41	69.5

Respondents' Perceived Usefulness of Certification Courses

Tables XXV, XXVI, and XXVII present the data from questions two and three. These questions were asked to ascertain respondents' perceptions of how certification courses helped prepare them to plan and organize the Occupational Orientation courses in their local independent school districts.

Table XXV contains the frequencies and percentages of responses for both the 1980 and present study. Based on this data. Qualls reported that three courses, "Methods and Media," "Occupational and Vocational Information," and "Planning and Organizing Programs of Vocational Guidance" were useful in helping them plan and organize the Occupational Orientation program in their school district. However, 52.2 percent of the 136 teachers completing the item felt that the extent to which the "History and Principles of Vocational Education" course was useful was "very little" or "little or none" (104).

TABLE XXV

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION TWO: TO WHAT EXTENT HAS EACH COURSE BEEN USEFUL TO YOU IN THE AREA OF PLANNING AND ORGANIZING YOUR CLASSES?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	34	23.9	23	46.0	57	40.1	13	26.0	22	15.5	9	18.0	27	19.0	3	6.0	2	14	2	4.0
Occupational and Vocational Education Information	39	30.5	25	55.6	54	42.2	11	24.4	17	13.3	6	13.3	18	14.1	3	6.7	0	0	0	0
History & Principles of Vocational Education	16	11.8	16	30.8	43	31.6	19	36.5	33	24.3	11	21.2	38	27.9	6	11.5	6	4.4	0	0
Methods & Media for Teaching Vocational-Tech. Subjects	62	48.8	31	57.4	40	31.3	17	31.5	12	9.4	4	7.4	13	10.2	2	3.7	1	0.8	0	0
Organization & Management of Voc-Tech Laboratory . . .	10	22.7	7	30.4	14	31.8	7	30.4	9	20.5	1	4.3	7	15.9	1	4.3	4	9.1	7	30.4

Responses in 1983 reflected a higher total percentage in the positive response columns for all five certification courses and, therefore, a lower percentage in the negative reply columns. Respondents' perceived value for three of these courses was significantly higher, as shown in Table XXVI, page 81.

As denoted in Table XXVII, there was a significant difference between the responses of the two groups on question three for the "History and Principles" and "Planning and Organizing" courses. (See Table XXVII, page 82.)

Respondents' Evaluation of Certification Courses

Tables XXVIII through XXXV present the data from questions four through ten. These seven questions pertained to the evaluation of certification courses and covered textbooks, relevancy, course organization, objectives, up-to-date course content and appropriateness of instructional materials. The first question in this section was: "To what extent was the textbook for each course relevant?" The data are reported in Table XXVIII, page 82.

BEST COPY AVAILABLE

TABLE XXVI

SIGNIFICANT DIFFERENCES BETWEEN GROUPS FOR QUESTIONS TWO AND THREE

No.	Question	Certification Course	X^2	Degrees of Freedom	Sig.
3.	To what extent has each course been useful to you in the day-to-day operation of your classes?	History and Principles	13.2140	3	.0042
2.	To what extent has each course been useful to you in the area of planning and organizing your classes?	History and Principles	12.4147	3	.0061
2.	To what extent has each course been useful to you in the area of planning and organizing your classes?	Planning and Organizing	12.3734	3	.0062
3.	To what extent has each course been useful to you in the day-to-day operation of your classes?	Planning and Organizing	11.6860	3	.0085
2.	To what extent has each course been useful to you in the area of planning and organizing your classes?	Occupational Information	9.9543	3	.0190

Respondents' perceptions of the relevancy of the textbooks for "Planning and Organizing" and "Organization and Management" remained relatively the same, but there were significant differences for the other three required courses as shown in Table XXIX, page 83. These differences appear to reflect a more positive response from the teachers surveyed in 1983.

Table XXX (page 84) contains the data from question five. Although there was a slight increase in the percentages in the "A Great Deal" response for each course in the 1983 survey, there were no significant differences.

Data from question six are presented in Table XXXI. Again there was a tendency for the 1983 respondents to respond more often on the positive side of the scale. The only significant differences, as noted in Table XXIX, was for the "History and Principles" course. Forty-eight or 94.1 percent of the respondents' responses were "A Great Deal" or "An Average Amount."

TABLE XXVII

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION THREE: TO WHAT EXTENT HAS EACH COURSE BEEN USEFUL TO YOU IN THE DAY-TO-DAY OPERATION OF YOUR CLASSES?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	22	15.8	18	36.0	56	40.3	17	34.0	30	21.6	8	16.0	29	20.9	4	8.0	2	1.4	3	6.0
Occupational and Vocational Education Information	27	21.6	18	40.0	54	43.2	13	28.9	22	17.6	9	20.0	21	16.8	5	11.1	1	0.8	0	0
History & Principles of Vocational Education	6	4.5	10	19.2	42	31.6	11	21.2	32	24.1	18	34.6	47	35.3	13	25.0	6	4.5	0	0
Methods & Media for Teaching Vocational-Tech. Subjects	46	36.8	30	56.6	47	37.6	13	24.5	13	10.4	5	9.4	19	15.2	4	7.5	0	0	1	1.9
Organization & Management of Voc-Tech Laboratory . . .	8	22.7	7	30.4	14	31.8	7	30.4	9	20.5	1	4.3	7	15.9	1	4.3	4	9.1	7	30.4

TABLE XXVIII

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION FOUR: TO WHAT EXTENT WAS THE TEXTBOOK FOR EACH COURSE RELEVANT?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	15	10.9	11	23.4	42	30.7	9	19.1	24	17.5	7	14.9	30	21.9	10	21.3	26	19.0	10	21.3
Occupational and Vocational Education Information	14	11.2	15	34.9	39	31.2	8	18.6	23	18.4	5	11.6	30	24.0	9	20.9	19	15.2	6	14.0
History & Principles of Vocational Education	12	9.0	15	30.6	36	26.9	14	28.6	29	21.6	11	22.4	34	25.4	6	12.2	23	17.2	3	6.1
Methods & Media for Teaching Vocational-Tech. Subjects	10	8.3	15	30.6	29	24.0	9	18.4	13	10.7	3	6.1	23	19.0	6	12.2	46	38.0	16	32.7
Organization & Management of Voc-Tech Laboratory . . .	7	17.9	6	27.3	11	28.2	3	13.6	8	20.5	2	9.1	6	15.4	2	9.1	7	17.9	9	40.9

BEST COPY AVAILABLE

TABLE XXIX

SIGNIFICANT DIFFERENCES BETWEEN GROUPS FOR QUESTIONS FOUR THROUGH TEN

No.	Question	Certification Course	X^2	Degrees of Freedom	Sig.
4.	To what extent was the textbook for each course relevant?	Methods and Media	13.4413	3	.0038
4.	To what extent was the textbook for each course relevant?	Occupational Information	13.1217	3	.0044
4.	To what extent was the textbook for each course relevant?	History and Principles	13.0372	3	.0046
9.	To what extent were the instructional materials and/or resources of each course appropriate?	History and Principles	11.7534	3	.0083
6.	To what extent was the course content of these courses well organized?	History and Principles	10.7231	3	.0133
7.	To what extent were the objectives of each course made clear?	History and Principles	10.6560	3	.0137
7.	To what extent were the objectives of each course made clear?	Occupational Information	10.0678	3	.0180
10.	How would you rate the value of this course in relation to the other certification courses that you have completed?	History and Principles	9.9436	3	.0414
7.	To what extent were the objectives of each course made clear?	Methods and Media	8.2037	3	.0420
8.	To what extent was the course content of each course current?	History and Principles	7.6983	3	.0527

TABLE XXX

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION FIVE: TO WHAT EXTENT WAS THE COURSE CONTENT OF THESE COURSES RELEVANT?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	42	30.2	17	34.7	49	36.3	19	38.8	24	17.3	9	18.4	24	17.3	3	6.1	0	0	1	2.0
Occupational and Vocational Education Information	40	31.5	23	50	54	42.5	12	26.1	17	13.4	8	17.4	16	12.6	3	6.5	0	0	0	0
History & Principles of Vocational Education	28	20.6	15	29.4	51	37.5	20	39.2	26	19.1	9	17.6	28	20.6	7	13.7	3	2.2	0	0
Methods & Media for Teaching Vocational-Tech. Subjects	62	48.4	26	50	44	34.4	15	28.8	10	7.8	10	19.2	11	8.6	1	1.9	1	0.8	0	0
Organization & Management of Voc-Tech Laboratory . . .	12	27.9	7	30.4	14	32.6	7	30.4	8	18.6	2	8.7	7	16.3	0	0	2	4.7	7	30.4

TABLE XXXI

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION SIX: TO WHAT EXTENT WAS THE COURSE CONTENT OF THESE COURSES WELL-ORGANIZED?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	50	35.5	23	46.9	55	39.0	20	40.8	17	12.1	3	6.1	18	12.8	2	4.1	1	0.7	1	2.0
Occupational and Vocational Education Information	55	42.3	28	62.2	51	39.2	12	26.7	10	7.7	3	6.7	14	10.8	2	4.4	0	0	0	0
History & Principles of Vocational Education	54	39.4	28	54.9	46	33.6	20	39.2	13	9.5	0	0	24	17.5	3	5.9	0	0	0	0
Methods & Media for Teaching Vocational-Tech. Subjects	58	45.7	33	61.1	48	37.8	15	27.8	7	5.5	5	9.3	13	10.2	1	1.9	1	0.8	0	0
Organization & Management of Voc-Tech Laboratory . . .	15	36.6	11	45.8	15	36.6	4	16.7	5	12.2	1	4.2	5	12.2	1	4.2	1	2.4	7	29.2

BEST COPY AVAILABLE

Data in Table XXXII pertain to question seven on the survey instrument. There was an increase in the percentages of respondents who rated the extent to which the objectives of the course were well-organized as "A Great Deal" for all five courses. That positive difference was significant for "Occupational and Vocational Education Information," "History and Principles," and "Methods and Media."

TABLE XXXII

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION SEVEN: TO WHAT EXTENT WERE THE OBJECTIVES OF EACH COURSE MADE CLEAR?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	55	38.5	25	50.0	56	39.2	18	36.0	13	9.1	2	4.0	18	12.6	4	8.0	1	0.7	1	2.0
Occupational and Vocational Education Information	53	40.8	31	67.4	55	42.3	12	26.1	10	7.7	1	2.2	12	9.2	2	4.3	0	0	0	0
History & Principles of Vocational Education	57	41.3	29	56.9	48	34.8	20	39.2	15	10.9	0	0	18	13	2	3.9	0	0	0	0
Methods & Media for Teaching Vocational-Tech. Subjects	57	44.5	35	67.3	52	40.6	13	25.0	9	7.0	1	1.9	10	7.8	3	5.8	0	0	0	0
Organization & Management of Voc-Tech Laboratory . . .	13	31.7	9	39.1	17	41.5	7	30.4	6	14.6	0	0	5	12.2	0	0	0	0	7	30.4

Again the positive trend was evident in Table XXXIII which contains the data from question eight. However, the only significant difference was for "History and Principles." More respondents in 1983 perceived the course content of "History and Principles" as being current.

Table XXXIV presents the data for question nine and deals with the appropriateness of instructional materials and/or resources of each course. There was a 21.3 percent increase in the "A Great Deal" response for "History and Principles." As noted in Table XXIX there was a significant difference for this course. The other four courses received a more positive rating, but there were no significant differences from the 1980 group.

BEST COPY AVAILABLE

TABLE XXXIII

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION EIGHT: TO WHAT EXTENT WAS THE COURSE CONTENT OF EACH COURSE CURRENT?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	61	42.7	28	54.9	63	44.1	18	35.3	8	5.6	2	3.9	9	6.3	2	3.9	2	1.4	1	2.0
Occupational and Vocational Education Information	62	48.1	29	63.0	50	38.8	13	28.3	8	6.2	3	6.5	9	7.0	1	2.2	0	0	0	0
History & Principles of Vocational Education	55	39.9	30	58.8	56	40.6	17	33.3	14	10.1	4	7.8	11	8.0	0	0	2	1.4	0	0
Methods & Media for Teaching Vocational-Tech. Subjects	71	56.5	33	62.3	42	32.8	15	28.3	7	5.5	4	7.5	8	6.3	1	1.9	0	0	0	0
Organization & Management of Voc-Tech Laboratory . . .	15	36.6	10	43.5	17	41.5	6	26.1	4	9.8	0	0	4	9.8	0	0	1	24	7	30.4

TABLE XXXIV

COMPARISON OF 1980 AND 1983 RESPONSES TO QUESTION NINE: TO WHAT EXTENT WERE THE INSTRUCTIONAL MATERIALS AND/OR RESOURCES OF EACH COURSE APPROPRIATE?

Certification Course	A Great Deal				An Average Amt				Very Little				Little or None				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	55	38.7	22	43.1	54	38.0	22	43.1	16	11.3	3	5.9	14	9.9	3	5.9	3	2.1	1	2.0
Occupational and Vocational Education Information	52	39.7	26	56.5	57	43.5	16	34.8	11	8.4	3	6.5	11	8.4	1	2.2	0	0	0	0
History & Principles of Vocational Education	41	29.7	26	51.0	64	46.4	20	39.2	13	9.4	5	9.8	18	13.0	0	0	2	1.4	0	0
Methods & Media for Teaching Vocational-Tech. Subjects	65	50.8	30	56.5	45	35.2	19	35.8	8	6.3	2	3.8	10	7.8	2	3.8	0	0	0	0
Organization & Management of Voc-Tech Laboratory . . .	13	31.7	9	39.1	17	41.5	7	30.4	6	14.6	0	0	5	12.2	0	0	0	0	7	30.4

BEST COPY AVAILABLE

In 1983 over 50 percent of the respondents reported that their certification courses were either "excellent" or "above average." There was a substantial increase in the perceived value of "History and Principles" and "Occupational and Vocational Education Information" when total percentages from the two highest responses for the 1980 and 1983 samples were compared. "Organization and Management of Vocational-Technical Laboratories" remained virtually the same for the two highest response categories. There was a slight decrease, 5.5 percent, in the high response categories of the 1983 group for "Methods and Media for Teaching Vocational Technical Subjects" and 9.6 percent more individuals who perceived the course as being "average." Based on the data reported, "Occupational and Vocational Education Information" in 1983 was identified as being the most benefitial certification course by the most teachers surveyed.

TABLE XXXV

HOW WOULD YOU RATE THE VALUE OF THIS COURSE IN RELATION TO THE OTHER CERTIFICATION COURSES THAT YOU HAVE COMPLETED?

Certification Course	Excellent				Above Average				Average				Below Average				Poor				Does Not Apply			
	1980		1983		1980		1983		1980		1983		1980		1983		1980		1983		1980		1983	
	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%	Fq	%
Planning and Organizing Programs of Vocational Guidance	33	23.4	14	28.0	35	24.8	14	28.0	39	27.7	12	24.0	15	10.6	3	6.0	16	11.3	1	2.0	3	2.1	6	12.0
Occupational and Vocational Education Information	34	26.4	17	37.8	35	27.1	15	33.3	35	27.1	9	20.0	11	8.5	1	2.2	11	8.5	2	4.4	3	2.3	1	2.2
History & Principles of Vocational Education	22	16.1	12	24.0	29	21.2	16	32.0	49	35.8	13	26.0	13	9.5	6	12.0	21	15.3	1	2.0	3	2.2	2	4.2
Methods & Media for Teaching Vocational Tech. Subjects	51	40.2	24	46.2	34	26.8	9	17.3	22	17.3	14	26.9	9	7.1	1	1.9	8	6.3	1	1.9	3	2.4	3	5.8
Organization & Management of Voc Tech Laboratory . . .	9	22.0	5	21.7	13	31.7	7	30.4	12	29.3	4	17.4	2	4.9	0	0.0	5	12.2	0	0.0	0	0.0	7	30.4

BEST COPY AVAILABLE

Table XXXVI contains the data for a question located in the demographic section. However, the subject of the question (Do you think that there is a need for additional courses to prepare Occupational Orientation teachers?) is more aligned to the questions on evaluating certification courses.

TABLE XXXVI

COMPARISON OF 1980 AND 1983 RESPONDENTS' PERCEIVED NEEDS FOR ADDITIONAL COURSES TO PREPARE OCCUPATIONAL ORIENTATION TEACHERS

Response	1980		1983	
	Frequency	Percentage	Frequency	Percentage
Yes	45	28.5	16	27.6
No	113	71.5	42	72.4

There has been virtually no change in Occupational Orientation teachers' perceived need for additional certification course work.

Respondents' Evaluation of the Occupational Orientation Teacher Certification Delivery System

The data in Table XXXVII compare the percentages of teachers that designated they had problems in completing certification courses. The percentages have remained virtually the same and have retained the same rank order. The number one perception of problems remained required courses not being offered at convenient locations. However, it should be noted that there has been a 17.9 percent decrease in the number of teachers who identified this as a problem.

The data in Table XXXVIII reinforce the findings from Table XXXVII. Again, location of course work was designated as the highest ranked concern by Occupational Orientation teachers for teacher certification program improvement. Displaying both a higher rank and percentage of responses, developing information packets on required certification courses and certification process, was recommended for program improvement.

Table XXXIX contains the data regarding teachers' perceptions of the roles and duties of Occupational Orientation Teacher Educators. The biggest variation in ranking was for item 27, providing information and/or assistance regarding resource persons, which dropped from first to fourth.

TABLE XXXVII

PROBLEMS IN BECOMING A CERTIFIED OCCUPATIONAL ORIENTATION TEACHER

No.	Problem	1980 N = 71			1983 N = 59		
		F	%	Rank	F	%	Rank
11.	Conflicts in scheduling of required courses.	38	22.2	2	13	22.2	2
12.	Lack of information regarding certification courses.	28	16.4	3	7	11.9	3
13.	Lack of adequate housing during summer school session.	7	4.1	5	2	3.4	5
14.	Problems concerning admission requirements to universities where certification courses are offered.	18	10.5	4	4	6.8	4
15.	Required courses offered at institutions that are not convenient to teachers.	74	43.3	1	15	25.4	1
16.	Other	12	7.0	. .	0	. .	. .

TABLE XXXVIII

POSSIBLE IMPROVEMENTS TO STRENGTHEN THE CERTIFICATION PROGRAM

No.	Improvement	1980 N = 171			1983 N = 59		
		F	%	Rank	F	%	Rank
17.	Developing information packets to provide knowledge of admission requirements to various universities.	59	34.5	4	24	40.7	4
18.	Developing information packets regarding the required certification courses and certification process.	71	41.5	3	28	47.4	2
19.	Offering required courses at times that are convenient to teachers.	82	47.9	2	27	45.8	3
20.	Offering the required courses at centralized locations.	112	65.5	1	30	40.8	1
21.	Other	9	5.3	. .	13	. .	. .

Occupational Orientation teachers in 1983 appeared to have a more "academic" perception of the roles and duties of teacher educators with items dealing with the improvement in the delivery of instruction to Occupational Orientation students occupying the first two ranks. The percentage of responses for items 23 and 24 increased also.

TABLE XXXIX

TEACHERS' PERCEPTIONS OF THE ROLES AND DUTIES OF OCCUPATIONAL ORIENTATION TEACHER EDUCATORS

No.	Roles/Duties	1980 N = 171			1983 N = 59		
		F	%	Rank	F	%	Rank
22.	Provide on-site technical assistance to teachers.	78	45.6	5	33	55.9	5
23.	Provide consultation services to classroom teachers.	100	58.5	3	40	67.8	2
24.	Provide both pre- and inservice training to teachers.	101	59.1	2	44	74.6	1
25.	Provide assistance in locating employment.	66	38.6	6	22	37.3	6
26.	Provide assistance with academic problems.	82	47.9	4	39	66.1	3
27.	Provide information and/or assistance regarding resource persons.	112	65.5	1	35	59.3	4
28.	Other	15	8.8	. .	5	8.5	. .

Respondents' Suggestions for Improving Occupational Orientation Teacher Certification Courses

The data gathered from the open-ended questions designed to solicit specific comments about teacher certification courses are presented in this section. Comments from teachers who had not completed all four of the required certification courses and comments from teachers who had are presented separately.

Table XL presents the data from Occupational Orientation teachers who had completed all four certification courses. The question was intended to solicit an over-all perceptual evaluation of the certification courses' curriculum content relevant to the specific instructional needs of neophyte teachers.

BEST COPY AVAILABLE

TABLE XL

QUESTION THREE: HOW MUCH SPECIFIC INSTRUCTION RELATED TO OCCUPATION ORIENTATION DID YOU RECEIVE FROM YOUR CERTIFICATION COURSES IN THE FOLLOWING TOPICS?

Topics	Responses										Totals		Mean
	Much				Some		None						
	5		4		3		2		1		N	%	
	F	%	F	%	F	%	F	%	F	%			
Curriculum	16	38.1	7	16.7	10	23.8	6	14.3	3	7.1	42	100	3.643
Instructional Activities	11	26.2	18	42.8	9	21.4	2	4.8	2	4.8	42	100	3.810
Methods of Instruction	17	40.5	12	28.6	9	21.4	4	9.5	0	0.0	42	100	4.000
Adolescent Development	5	11.9	3	7.1	14	33.3	11	26.2	9	21.4	42	99.9	2.619
Learning Theory	6	14.3	14	33.3	14	33.3	7	16.7	1	2.4	42	100	3.405
Philosophy of Voc. Education	20	47.6	14	33.3	7	16.7	1	2.4	0	0.0	42	100	4.262
Methods of Class Organization	11	26.8	14	34.1	12	29.3	2	4.9	2	4.8	41	99.9	3.732
Using Advisory Committees	7	16.7	9	21.4	15	35.7	5	11.9	6	14.3	42	100	3.143

Philosophy of vocational education and methods of instruction were the two areas that appear to receive the highest emphasis. The lowest, with a mean of 2.619 was adolescent development, a topic germane to the student population served by Occupational Orientation.

The responses received from the Occupational Orientation teachers who had not completed all of their certification classes are found in Table XLI. Questions two through five are included.

TABLE XLI

SUGGESTIONS FROM TEACHERS WHO HAVE NOT COMPLETED ALL CERTIFICATION COURSES FOR CERTIFICATION COURSE IMPROVEMENT

QUESTION NUMBER	QUESTION AND RESPONSES
2.	WHAT COMPETENCIES NEEDED TO TEACH OCCUPATIONAL ORIENTATION WERE NOT TAUGHT IN THE COURSES THAT YOU COMPLETED? Classroom management Not enough sharing in the Methods class of different teachers' ideas None

SURVEY NUMBER	QUESTION AND RESPONSES
3.	IF THE CONTENT OF OCCUPATIONAL ORIENTATION TEACHER CERTIFICATION COURSES WERE TO BE CHANGED, WHAT SUGGESTIONS WOULD YOU OFFER? WHAT CHANGES SHOULD BE MADE?
	I think the Guidance Program Development course is not as important as some of the basics
	Making the Methods class more applicable to the program
	More Methods and Media (sharing of experiences)
	Less emphasis on History of Vocational Education, more on present/future occupational information
4.	WHAT AREAS OF INSTRUCTION DID YOU RECEIVE IN YOUR CERTIFICATION COURSES THAT PROVED TO BE OF LITTLE VALUE?
	Guidance Program Development
	I was disappointed in Methods - I expected this to be a neat class and it could have been
	Methods and Media course was geared for office education and was not relevant to occupational investigation
	Research in Guidance - names, etc. to memorize not relevant to professional growth in vocational guidance
	All instructional areas were valuable
5.	WHAT AREAS OF INSTRUCTION DID YOU RECEIVE IN YOUR CERTIFICATION COURSES THAT PROVED TO BE OF GREAT VALUE?
	Methods and Media
	History and Principles
	Explanation of the comprehensive system and how my program fits the total picture
	Methods and Media course
	Methods of teaching, vocational guidance counselor/teacher role, materials to assist in program development and implementation
	Methods and Media for teaching vocational subjects

Respondents gave a variety of answers to question two. There were several responses which indicated that all competencies needed had been taught. Two respondents expressed a need for more instruction in dealing with classroom management and relating to the young adolescent. One respondent stated that more sharing of different teachers' ideas was needed.

For question three, two respondents expressed a need for more emphasis on the "Methods and Media" course and relating it more to Occupational Orientation. Two respondents felt that more emphasis was needed in the area of providing teachers with present and future occupational information and less emphasis on guidance program development and the history of vocational education.

Several respondents stated that all of the instructional areas were valuable to them in teaching Occupational Orientation courses in response to question four. Two respondents were not satisfied with the "Methods and Media" course because it was not what they expected and was not relevant to occupational investigation. Two respondents felt that the "Guidance Program Development" course was not relevant to professional growth in vocational guidance.

Comments made in response to question five indicated that "Methods and Media" was the most valuable course. Half of the respondents said that the "Methods and Media" course was the most valuable to them and the other half stated that the "History and Principles" course was the most valuable.

Table XLII contains comments made by Occupational Orientation teachers who had completed all four certification courses. Questions four through eight are included.

In response to question four, many respondents expressed the need for instruction in the area of classroom management and discipline techniques. A few respondents mentioned a need for help with public relations in the public school setting, especially when dealing with academic teachers and supervisors that were hostile to occupational investigation. Two respondents felt that more hands-on experience was needed when they were to teach the occupational clusters. Other responses included a need for more exchange of ideas among teachers, specific help with curriculum, more information on sources of audio-visual materials, budget planning, record keeping, filing and follow-up on students.

A majority of the respondents stated in question five that the "History and Principles" course was interesting, but of little value in teaching class. However, some respondents commented that the information obtained in this class was very valuable as background information for professionals in vocational education. One respondent suggested that this subject be offered as a weekend workshop.

Commenting on question six, a majority of the respondents stated that the "Methods and Media" course was of great value to them. Several respondents stated that the "Planning and Organization" course was very interesting and educational and was fundamental to teaching vocational subjects. One respondent said that the "Lab Management" course was of great value and one respondent said that the "History and Philosophy of Vocational Education" course was valuable. Several stated that the "Occupational and Vocational Information" course was of value.

TABLE XLII

SUGGESTIONS FROM TEACHERS WHO HAVE COMPLETED ALL CERTIFICATION COURSES FOR CERTIFICATION COURSE IMPROVEMENT

SURVEY NUMBER	QUESTION AND RESPONSES
4.	WHAT COMPETENCIES NEEDED TO TEACH OCCUPATIONAL ORIENTATION WERE NOT TAUGHT IN YOUR CERTIFICATION COURSES?
	The occupational investigation teacher does not get any specific help in curriculum
	I feel my instructor touched base on most areas needed or gave sufficient information on resources available to get this information needed
	Classroom management
	D-P-T classification, use of Occupational Orientation Investigation touched only lightly, sources of AV materials and utilization received little emphasis, development of individualized AV materials
	Discipline techniques
	None
	Record keeping, filing, follow-up, what pre-test or post-test instruments to use
	I believe all areas were adequately covered
	Occupational investigation is not like a "regular" class. I think more stress should be placed on this. Fortunately, I have my Vocational Office Education certification and realized the importance of vocational education and had some background in the area. For someone who has not, it could be a difficult transition that would not be helpful to the occupational investigation curriculum.
	Would have liked a unit or course on exploring the East Texas State University curriculum in depth. Also an exploration of interest surveys (brief).
	How to deal with academic teachers and supervisors that are hostile to occupational investigation; budget planning and type of supplies and materials permitted to buy; use of advisory committee
	Hands-on activities need to be provided when teaching occupational clusters
	Need more exchange of ideas - like the swap-shop in Austin
	Practical skills for classroom discipline and management. Integration of information, resources, media, etc. to make classroom presentations have unity of flow and to appeal to students at the same time.
	None
	At the time, I was not preparing for teaching Occupational Orientation Investigation itself. We were prepared for working with Elementary teachers in presenting Career Education concepts in the elementary classroom. The courses seemed adequate at the time.

SURVEY NUMBER	QUESTION AND RESPONSES

All competencies were discussed, but some very lightly. More demonstration would have been helpful.

Public relations with other school personnel, the chain of command; the do's and don'ts of a new teacher if they want to fit into the structure

Most of it

None in particular - however, the Methods and Media course included a sizeable majority of Indonesian students which resulted in: a) much of class geared to them even though they had some additional sessions other than scheduled classtime, b) a class too large for good "hands-on" experience, and c) low satisfaction of my expectations. Also, building was to be razed as soon as term ended and apparently some equipment was unavailable.

None

Where to get information on applications, interviews and resumes. How to teach clusters.

None

For occupational exploration teachers in lab situations: a) help with organizing specific work areas, and juggling kids and materials and equipment to meet students' individual needs; b) help us learn where to find help - each occupational exploration unit (teacher getting certification) has a different set of needs from everyone else, so you can't give us pat answers but you can help us discover our resources; c) for sheerly being outnumbered as an occupational exploration teacher by occupational investigation teachers, most of the information I received was/is valuable only in a general sense. I really (desperately) needed specifics for lab experiences.

My Methods class was a great disappointment. I have benefitted much more and learned much more from summer workshops than I learned in that class. I resented having to spend so much money for something that was, at best, a duplication.

Method for maintaining classroom discipline

Subject area related specifically to occupational orientation - courses there related more to vocational-technical teachers and/or school (not vocational) counselors

5. WHAT AREAS OF INSTRUCTION DID YOU RECEIVE IN YOUR CERTIFICATION COURSES THAT PROVED TO BE OF LITTLE VALUE?

History and Systems was interesting, but of little value in teaching my class

History and Principles

Knowledge of History and Development of Vocational Education

Counseling theories, investigation of a vocational program already set up

None

History and Principles (interesting, but no practical application)

Used most of it and had to seek out a lot more on my own

SURVEY NUMBER	QUESTION AND RESPONSES

History and Principles was interesting, but did not help me teach occupational investigation

Too much philosophy

History and Principles

Psychological Theories - Programs of Vocational Guidance

History and Principles

History and Principles

History of Vocational Education - This is necessary and good to know, however it is a basis for understanding the programs and not information for presenting the materials

The History and Principles course I'm sure has its purpose, but I do not see how it really relates

History

History of Vocational Education - (outdated, incomplete, fragmented) Principles of Learning - (Did not treat affective and psychomotor domains as important) Levels of learning not covered well enough to provide adequate introduction

History and Principles

The Vocational Guidance Program class was of no value to me as an occupational investigation teacher

History and Principles

History and Principles

None

The Methods and Media course did not seem broad enough in concept and didn't cover much in the way of the many different things available

The History and Principles class - BUT - it was not of no value. The section on laws relating to equal access has been helpful

Occupational and Organizing Programs of Vocational Guidance

History and Principles - parts could have been omitted - others overlapped material covered in other courses. A weekend workshop would have been sufficient to cover the real meat of the course.

History, conflicting theories of needs

In relation to teaching occupational investigation - History and Principles - although it is important as a vocational professional

History and Principles - not the fault of course content, but fault of instructor

From time to time they have all been needed

History and Principles

Planning and establishing guidance programs was of little use in conducting an on-going occupational vocational course

SURVEY NUMBER — QUESTION AND RESPONSES

6. WHAT AREAS OF INSTRUCTION DID YOU RECEIVE IN YOUR CERTIFICATION COURSES THAT PROVED TO BE OF GREAT VALUE?

The Methods class and Planning and Organization were of great value. I have used this material every semester!

Methods and Media for teachers, vocational subjects, Planning and Organizing Programs

What to teach, organization skills, media and classroom set-up for film, speaker, projects

None

Methods of instruction, goals and objectives

Methods and Media - I received instructions on equipment usage, how to make your own audio-visual aids, and the value and positive aspects of teaching with A.V.

Job information services, classification system, testing system and sources

Course outline, instructional activities

Occupational Information, Planning and Organizing

Sources of career information , overall picture of vocational education

Methods

Information Systems information

Methods and Media of teaching vocational education

Lesson plans, use of resource materials

Sources of material and subject matter; introduction to instruments for student evaluation (i.e., COPs, Strong-Campbell, etc.); introduction to methods of researching for occupational investigation related articles and materials

The Methods and Media portion

The Occupational and Vocational Information class was very interesting and educational. I learned about the DOT, OOH, the traditional guidance approach, etc.

Methods and Media

Resource people, games and fun activities

Sharing of materials with other teachers

The background of History and Philosophy of Vocational Education

I am surprised to find that the course I thought I needed least, and the last one I took, to be valuable for me at least in the sense that I can take the information directly to the lab situation and improve my teaching. I'm sure I feel this way because that is where I needed the most help. (The Lab Management course)

Methods and Media for teaching vocational subjects

SURVEY NUMBER

QUESTION AND RESPONSES

Planning and Organizing Programs of Vocational Guidance - course content seems fundamental to teaching my subject

Lesson plan development, practical how-to type information, teaching techniques

Courses related to career resources

Methods of Occupational Investigation

Methods and Media have been very important

Methods of teaching

Vocational Information

Methods and Media

Instructional Activities

Occupational Information, Methods and Media

Occupational Information - Resources

Methods

The class sessions on Methods and Media and locating Vocational Information were most helpful

7. IF THE CONTENT OF OCCUPATIONAL ORIENTATION TEACHER CERTIFICATION COURSES WERE TO BE CHANGED, WHAT SUGGESTIONS WOULD YOU OFFER? WHAT CHANGES SHOULD BE MADE?

More materials and ideas to make the class more interesting

None

None

Offer a course for only occupational investigation teachers. Usually, I was the only occupational investigation teacher in class - there was such a variety!

None

Many changes have been made. The current course content is much improved over material utilized in the earlier years of Occupational Orientation training.

An additional three hours in Methods or Course or Curriculum Development

Some type of hands-on experience with an industry

More information on overall vocational programs (i.e., high school programs)

None, because each of those courses has been revised to fit the needs of the Occupational Orientation teacher

Something more helpful maybe in the Guidance and Counseling area instead of History and Principles. Maybe the History and Principles could be someway combined with Occupational and Vocational Education Information.

Less technicality; more practicality of teaching skills

Consolidate some of the present courses; provide new course on computer related instruction; provide course on future trends in the job market and the lifestyle (society changes)

I think better instructors to motivate students and instructors who are prepared to teach, not to fool around and waste time are badly needed in vocational education

Combine all four courses into two. Methods and Media and Vocational Education Information - History, etc. could be combined with one of the above

Let's keep abreast of the times. Teachers have no time to fool around with filing or to be calling on the phone for speakers. Update curriculum with the latest trends in employment, the changing behavior of students, how to deal with administrators, what exactly should the teacher expect from students. (I find myself expecting too much)

I don't know of any

Add computers to the Methods and Media class. The only other thing bothering me is that specific attention was not given to the VEH occupational exploration lab situation. There was not one single time that the topic was included where I had not asked for help. (Of course, I was the only teacher in this situation.) If VEH occupational exploration units are going to be allocated, then teacher training for the units is essential. There are four reasons that I have made it to the third year in teaching my class, and the certification classes I took have absolutely nothing to do with it: 1) When teaching prior to this class, I had some mainstreamed students (only four); 2) I have attended the CVAE-VEH workshop at Texas Tech (prior to teaching CVAE Apparel Services); 3) Dr. Goodwin came to my rescue; and 4) I have a learning disabled child of my own. And it is insane, not to mention dangerous to put a VEH teacher in a lab situation without an aide. Provisions should be made at the State level, providing funding for them.

I believe most of the courses should be condensed - perhaps offered in weekend workshops. Individuals who have already completed methods courses should not have to repeat Vocational-Technical Methods Media.

In my courses I was either the only one or one of two or three occupational investigation teachers. Therefore, occupational investigation was addressed only in passing to a large degree. I found these courses interesting and in many cases applicable; but often I had to "place myself into the context" of much of the subject matter. I do not think it is practical for the University to offer specific Occupational Orientation courses on a continuing basis. I would suggest a seminar course for Occupational Orientation teachers offered at graduate level, without restrictions of minimum student load. This might be a logistical nightmare considering the high-density, low-density area served by Sam Houston State University (and overlapped by the University of Houston) and the few new Occupational Orientation teachers each year. Possibly, this one seminar might be available at only one or two of the Universities in a condensed one-week course. This should be in lieu of the Planning and Organizing Vocational Guidance Programs course.

A course about clusters, resource books, information on jobs

More practical classroom procedures and/or handouts. I got the most value out of Bill's (Hollenback) class when he had us share with each other and when certified occupational investigation teachers from the area talked with us.

More attention should be given to other government publications, not just the D.O.T.

SURVEY NUMBER	QUESTION AND RESPONSES

Add assertive discipline, more about current requirements for the handicapped

More courses dealing with occupational investigation subject matter and instructional strategies

Some courses overlapped too much. Two courses used the same textbook which was out of print.

Public relations with other school personnel. The do's and don'ts of a new teacher trying to fit into the structure.

Teaching the four instructional modules to the teachers

More on actual material to be taught to students

8. PLEASE IDENTIFY ANY NEW COMPETENCIES THAT YOU FEEL ARE NEEDED TO TEACH OCCUPATIONAL ORIENTATION.

The student should learn budget/money management

None

Computer

Computer-based system of job search and related areas of potential

None (they need to care!)

Definite competencies for job clusters

Some computer use

None

Supervised practice teaching and student counseling; ability to develop (or adapt) adequate class materials (i.e., use of games, workbooks, etc.) at various levels of student achievement; how to use class time with minimum loss of teaching time; concept of student as a user (consumer) of educational institutions

Many changes have been made since I took these courses

Student motivation, student discipline, field trip organization, public relations with the community, etc.

Occupational investigation and occupational exploration teachers should have workshops or in-service training on the job, maybe even spend part of their classroom time working in the real world to experience the changing job market in order to be better informed. Computer training will be a must very soon. Do something ahead of schedule rather than after the fact.

None

Modifications to tests to be given to the handicapped students. (Pass/fail criteria, how to administer, etc.)

Student teaching - coming from business or industry directly to public school is a big adjustment

More information on computer use in occupational investigation

SURVEY NUMBER	QUESTION AND RESPONSES
	Computer
	Computer literacy and use
	Computer literacy
	Computers

Responding to question seven, several respondents felt that the courses could be condensed into weekend workshops or into fewer classes. One suggestion was to combine the materials covered in the teacher certification courses and to offer only two courses: "Methods and Media" and "Vocational Education Information." Several respondents mentioned a need for instruction on computer use and future trends in the job market. There were a variety of other responses to this question: more hands-on experience with an industry, more teaching skills, updated curriculum, more instruction for teaching the handicapped, and public relations with school personnel.

When asked in question eight to identify new competencies needed to teach Occupational Orientation courses, many respondents stated that computer literacy and use is a competency that is needed to teach occupational investigation. A few respondents mentioned that student teaching and counseling for occupational investigation teachers is needed because coming from business and industry to public school is a big adjustment.

Summary

Occupational Orientation teachers who attended the Vocational Guidance Personnel Workshop held July 31 through August 3, 1983 were asked to complete a questionnaire on teacher education. The questionnaire consisted of a demographic section, a replicated survey and a survey to solicit current information on teacher education/training in the State.

When the responses from the replicated survey were compared to the original study completed in 1980, it was found that the teachers in 1983 perceived much of their teacher education more favorably. Many of the responses were significantly different. The "Methods and Media" and "Occupational and Vocational

Education Information" courses appeared to have the most usefulness to teachers in the areas of planning and organizing their classes and in the day-to-day operation of their classes. It is interesting to note that the "History and Principles" course was perceived as the least practical and relevant of the certification courses and was also perceived as a well-organized, developed and presented course.

The objective evaluation of the certification courses was very positive. If there was any "weakness" it appeared to be in the area of textbook relevancy. However, even the responses for this area were high.

As expected, respondents did not perceive any need for additional certification course work to prepare Occupational Orientation teachers. There was less than one percentage point difference in the number of respondents answering this question in 1980 and 1983. In 1983, 72.4 percent of the respondents did not perceive the need for additional courses.

There has been no change in the problems the respondents experience in becoming certified. Certification courses not being offered at institutions that were convenient to teachers continued to rank as number one and conflicts in scheduling of required courses was second. However, there was an 18 percent drop in the frequency of respondents who designated institutional convenience as being a problem. This same "problem" was identified when respondents designated possible improvements to the certification program. Over 50 percent of the teachers indicated offering required courses at centralized locations would improve the teacher certification process.

The greatest change in responses from 1980 to 1983 was in the respondents' perceptions of the roles and duties of teacher educators. In 1980 the first ranked role/duty was to provide information and/or assistance regarding resource persons. This response was ranked fourth in 1983 and providing both preservice and inservice to teachers was ranked highest. Providing on-site technical assistance was ranked fifth in a total ranking of six places.

To solicit more specific information, additional and "open-ended" questions were asked of the respondents. Teachers were asked to rate eight areas of instruction in light of the education received in certification courses. Methods of instruction and philosophy of vocational education were the two instructional areas perceived to have been covered the most. Using advisory committees fell in the "some" range and adolescent development, the lowest rated, approached the "none" range.

In response to "open-ended" questions concerning the certification courses offered in Occupational Orientation, teachers responded with a variety of answers. Their comments indicated that there were competencies not taught in the certification courses such as (1) more instruction in the area of classroom management and discipline techniques; (2) help with public relations in the public school setting; (3) more sharing of different teachers' ideas; (4) more hands-on experience when teachers are to teach occupational clusters; (5) more information on sources of audio-visual materials; (6) instruction on record keeping, filing, budgeting and follow-up on students; and (7) use of computers in the classroom. An area of instruction in the certification courses that proved to be of little value to teachers of Occupational Orientation was the "History and Principles" course. However, several respondents stated that even though the course was not helpful to them in teaching their classes, it provided them with valuable background information as professionals in vocational education. It was suggested that the content of this course be offered in a weekend workshop.

A few respondents felt that due to the instructional approach used by the instructor the "Methods and Media" course and "Planning and Organizing Programs of Vocational Guidance" were not relevant to Occupational Orientation. Many respondents stated that all of the instructional areas were valuable to them in teaching Occupational Orientation.

An area of instruction in the certification courses that proved to be of great value to teachers was the "Methods and Media" course. A majority of the respondents mentioned this course as the most valuable to them.

Suggestions for changes in the content of Occupational Orientation teacher certification courses included (1) condensing some of the courses into weekend workshops or into fewer courses; (2) adding more instruction on computer use and future trends in the job market; (3) more hands-on experience with an industry; (4) more instruction for teaching of the handicapped; and (5) more teaching skills, updated curriculum, and public relations with school personnel.

Recommendations

The findings from the evaluations of teacher certification programs for Occupational Orientation provides evidence that there is a great deal of disparity between the teacher education offered by the various teacher certification institutions. There was little consistency in either the subjective or objective evaluations made by teachers regarding the preservice or inservice training.

Even though Occupational Orientation teachers receive one of two certifications--occupational investigation or occupational exploration--the training they reported receiving seemed to have very little commonality in content or quality. The dichotomy of responses given by the teachers surveyed gives evidence that some certification programs are doing an excellent job and others are not.

Currently the ultimate responsibility for competent teacher education rests in the hands of a small number of certifying institutions. It appears that when the teacher certification institutions address the areas indigenous to Occupational Orientation (or vocational guidance) teachers are satisfied with their education/training. When they do not, teachers do not appear to be adequately trained to teach Occupational Orientation. Ultimately students suffer, programs wither and many times are dropped.

It is further apparent that merely completing a required number of courses does not guarantee a trained teacher who possesses competencies needed to teach Occupational Orientation courses. The data suggest that many times teachers are not exposed to the training they perceive as being necessary to teach Occupational Orientation courses. Based on the comments made by many teachers, it seems that some of the teacher training is violating basic vocational education tenants. "The instructor must have had successful experience in the application of skills and knowledge in the operations and processes he undertakes to teach" (Prosser). This was illustrated by a comment made by one of the respondents: "If V.E.H. occupational exploration units are going to be allocated, then teacher training for the unit is essential."

Before many of the problems can be solved, the presence of a dilemma must be acknowledged. Potential teachers find the inconvenient locations of teacher training institutions to be the greatest problem in their certification process. However, a proliferation of new approved certification programs to meet teachers' needs may do more harm than good. With the decrease in new units approved and the stabilizing of current units, fewer new teachers are needed. (In 1979, 40 percent of the teachers were not certified--either first- or second-year teachers.) Based on basic economics, institutions that attract few Occupational Orientation teachers will place them in vocational education classes with a more generic appeal. The neophyte teachers will not be exposed to specific Occupational Orientation training.

It may take more than improving existing models of preservice and inservice programs. New vehicles of education/training may have to be developed. Inservice activities could play a major part in improving teachers of Occupational Orientation. It seems to have played an integral part in improving instructional strategies in the classrooms, but has not addressed more specific concerns as indicated by teachers. However, regional inservice has been sketchy at best.

The following specific recommendations are based on the findings from the data collected in this study.

1. The specific competencies needed to teach occupational investigation and occupational exploration should be identified and addressed in all courses offered by approved certifying institutions.

2. More flexibility needs to be built into the certification process such as certification courses and regional inservice offered on weekends, regional special institutes, accelerated classes, personalized learning through service centers, etc.

3. Teacher evaluation in certification courses should be competency-based with some type of documentation to demonstrate proficiency.

4. Individual university programs of teacher certification need to be evaluated on factors other than quantitative aspects.

5. As requested by teachers, classroom management/discipline and adolescent development as it affects learning should be included in the instructional content of certification courses, especially for those individuals seeking certification who have not previously been teachers.

6. Training in actual computer use and application (not just affective elements) should be included in certification and inservice.

7. Actual materials developed for occupational investigation and occupational exploration such as curriculum/instructional materials, research reports, program standards, etc. should be used in the certification courses for instructional support.

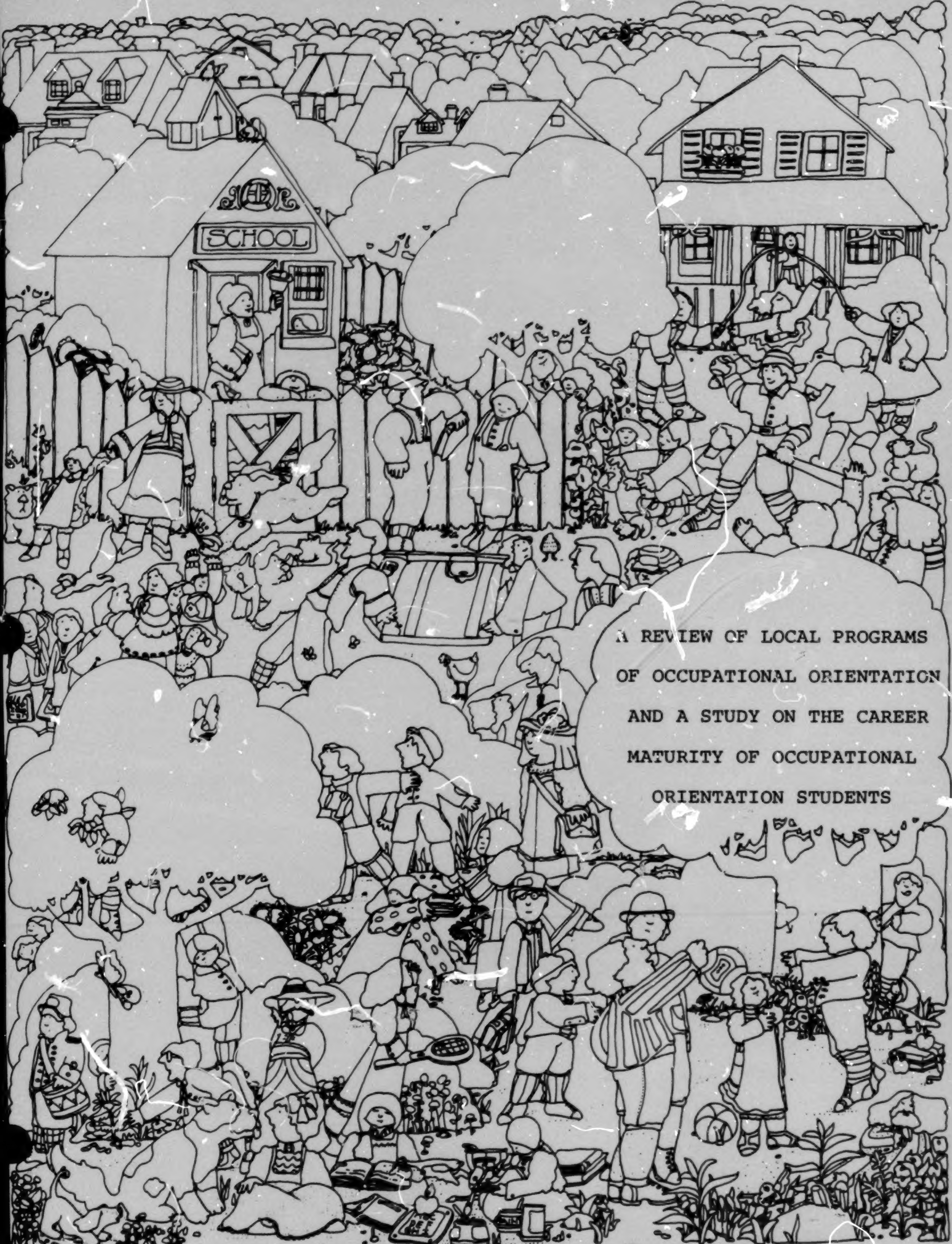
8. A teacher observation procedure or other activities to allow on-site support and review from teacher educators should be offered for individuals coming from business and industry and having never taught before.

9. More emphasis should be placed on training teachers to use advisory committees and public relations within the schools and communities.

Bibliography

1. Nie, Norman H. et al., *SPSS: Statistical Package for the Social Sciences*, 2nd ed., New York, McGraw-Hill Book Company, 1975.

2. Qualls, David, "Teachers' Perceptions of the Occupational Orientation Teacher Training/Certification Program in Texas," unpublished doctoral dissertation, North Texas State University, Denton, Texas, 1980.



A REVIEW OF LOCAL PROGRAMS OF OCCUPATIONAL ORIENTATION AND A STUDY ON THE CAREER MATURITY OF OCCUPATIONAL ORIENTATION STUDENTS

PART IV

Introduction

Individuality has been the key descriptor for Occupational Orientation programs at the local level. Local education agencies have developed programs to meet the needs of their student populations and to fit the structure of their school system. Therefore, local programs have always displayed diversity (1, 2).

To develop any type of Occupational Orientation Program evaluation at the State level, two factors must be taken into consideration: (1) the curriculum for occupational investigation and occupational exploration has been standardized only in the most general manner and (2) there is very little conformity from district to district in the delivery systems of either occupational investigation or exploration.

The Problem of the Study

The problem of this study was to identify variables that contribute to the diversity of occupational investigation and occupational exploration programs at the local level and determine their effect on evaluating student performance.

The Purpose of the Study

The purposes of this study were to (1) compile a complete description of local Occupational Orientation programs to identify variations in local program structures; (2) identify the purpose of the Occupational Orientation Program as perceived by local education agencies; (3) administer the Career Maturity Inventory to students in different types of Occupational Orientation programs to determine the effect of Occupational Orientation on students' career maturity; and (4) evaluate the use of the Career Maturity Inventory as a method of evaluating Occupational Orientation programs.

Research Questions

1. How many Occupational Orientation units are being taught by first-year teachers and how many are being taught by experienced teachers?

2. What is the variation in the organizational characteristics of local Occupational Orientation units for instructional framework and student populations served?

3. What is the purpose of Occupational Orientation as perceived by local education agency personnel?

4. What are the effects of various Occupational Orientation programs on the career maturity of students in the areas of (1) attitudes, (2) self-appraisal, (3) occupational information, (4) goal selection, (5) planning, and (6) problem-solving.

5. Is the Career Maturity Inventory a viable method of assessing students' achievement in programs of Occupational Orientation?

Instrumentation

Evaluation of Occupational Orientation Programs

Three separate survey instruments (see Appendix B) were sent to each local education agency supporting an Occupational Orientation program. Two of the surveys were designed to obtain specific demographic information on occupational investigation and occupational exploration programs. The third instrument was designed to obtain evaluations of the state-level management system for Occupational Orientation. The third instrument did not require the respondents to identify the school district. It did require identification of the professional position for the person completing the survey.

The instruments were constructed in a manner that required a minimum amount of time to complete. After the first drafts, the instruments were reviewed by members of the Project Advisory Committee and staff members from the Research Coordinating Unit. The final drafts of the instruments reflected advised changes.

The instruments to obtain demographic information asked questions to ascertain if districts had experienced or new teachers, to determine the organizational characteristics of local occupational investigation and occupational exploration programs, and to identify the perceived purpose of Occupational Orientation at the local level. The "confidential" survey used a Likert-type scale to obtain local education agency evaluations of Occupational Orientation and four "open-ended" questions to gain specific suggestions.

To help obtain a return of 100 percent, a cover letter from Dr. Paul Lindsey, Associate Commissioner for Occupational Education and Technology, Texas Education Agency, was sent with the surveys. An envelope was enclosed for the confidential survey, as was a postage-paid return envelope. Approximately three weeks after the original mailing, a follow-up postcard was sent to those who had not responded. Another follow-up was completed by telephone to achieve the 100 percent return.

Evaluation of Occupational Orientation Students

The teacher-members of the Project Advisory Committee were asked to determine a method of evaluating students in Occupational Orientation programs. Being cognizant of the inherent difficulties of doing a competency-based type of test, they suggested using the *Career Maturity Inventory* (CMI) by John O. Crites. The CMI was designed to measure career choice competencies that are crucial in career decision making. It consists of two tests, the Attitude Scale and the Competence Test.

"The *Attitude Scale* elicits the feelings, the subjective reactions, the dispositions that the individual has toward making a career choice and entering the world of work" (3, p. 5). Five attitudinal variables are surveyed: (1) decisiveness in career decision making, (2) involvement in career decision making, (3) independence in career decision making, (4) orientation to career decision making, (5) compromise in career decision making. The Screening Form A-1 of the Attitude Scale, used in this study, yields one total score and takes about thirty minutes to administer.

In determining the applicability of the *Attitude Scale* for the group being tested, consideration must be given to the reading level. The test is designed for students with at least a sixth-grade reading level. Therefore, the reading ability of those being tested must be determined. The span of applicability for the Attitude Scale ranges from the six[illegible]rade (by reading level) to college.

"The *Attitude Scale* is applicable [illegible] wide range of groups, differing in curricular, demographic, and many other characteristics. The appropriate group must be used to determine the relative standing of an individual at a given point in career development, but the process of career development is one of increasing growth for all individuals, irrespective of their group membership" (3, p. 6).

The second part of the CMI administered to the students was the *Competence Test*. This test measures the cognitive variables involved in career decision making. "These include appraisals of the individual's job-related capabilities (strengths and weaknesses), knowledge about the world of work, adeptness in matching personal characteristics to occupational requirements, foresight in planning for a career, and effectiveness in coping with the problems which arise in the course of career development" (3, p. 4). The *Competence Test* consists of five parts: (1) Self Appraisal, (2) Occupational Information, (3) Goal Selection, (4) Planning, (5) Problem Solving. As with the *Attitude Scale*, an attempt was made to write the items in the Competence Test at the sixth-grade reading level.

However, due to the nature of the career material used on this test, some of the words chosen from the "world of work" were above the sixth-grade reading level.

The Competence Test has been designed to be interesting and relevant to older individuals as well. This test can be used with older adolescents, young adults and adults beyond the developmental stage. Research indicates that the Competence Test is "applicable equally to males and females, minorities, and other special groups" (3, p. 12). The administration of the test takes approximately two hours.

The Attitude Scale and the Competence Test, taken together, provide an overview of behaviors and attitudes influencing mature career decision making and development. Since 1961-1962, when the CMI was administered for the first time, the test has been used over 200 times to measure career maturity. Research findings have indicated that the CMI is a reliable and valid measure of career choice attitudes and career choice competencies.

Data Analysis for Local Program Evaluation

Profile of Respondents

The first mailing was based on a mailing list obtained from the Texas Education Agency. However, when it appeared that the list was less than accurate, a second mailing was completed. The second mailing was based on a list compiled from the Department of Occupational Education and Technology Unit Allocation System dated November 23, 1983. Of the 150 local education agencies contacted, 149 responded with the necessary data. One school district on the list reported that they did not implement an occupational investigation unit that had been allocated to them.

It should be noted that there were additional units of both occupational investigation and occupational exploration in the State that were supported by local funds only. These units were not included in the population.

All data were tabulated by hand to determine frequency and percentage. When appropriate, means were determined. Table XLIII contains the raw data reported by school districts that have partial, full or multiple units of occupational investigation. Table XLIV contains the same for occupational exploration. In the 149 local education agencies surveyed, there were 273 units of occupational investigation and 16 of the districts had 58.5 units of occupational exploration.

TABLE XL

OCCUPATIONAL INVESTIGATION PROGRAM DATA REPORTED BY INDIVIDUAL LOCAL EDUCATION AGENCIES

ISD	NUMBER OF UNITS	TEACHING EXP	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
Alice	1	N/1	55	6	18	1,000	16	80	R/1	No	Yes	O.I.	8	No
Allen	1	E/1	50	5	18	400	24	218	R/1	No	No	O.I.	8	No
Amarillo	1	E/1	55	4	36	600	5	20	VEH/1	No	No	O.O. VEH/AH	9-10	No
Atlanta	1	E/1	45	7	36	See #1	15	95	R/1	No	Yes	O.I.	7-8	No
Austin	2	E/2	55	6	18/1 36/1	1,500	VEH/6 R/21	200	R/1 VEH/1	Yes- R O.I.	No	O.I.	7-8	No
Azle	1	E/1	55	4	18	600	20	160	R/1	No	No	O.O.I.	8	No
Bastrop	1	N/1	55	5	18	1,500	26	278	R/1	No	No	O.I.	9	Yes
Beeville	1	E/1	45		18		25		R/1	No	No	O.O.	8	Yes
Bells	½	E/1	60		36	300	19	38	R/½	No	No	O.O.	8	Yes
Boles Home	1	E/1	60	4	36	800	20	76	R/1	Yes	No		7-9	Yes
Brenham	1	E/1	45	7	18	2,185	19	115	R/1	No	Yes	O.I.	7-8	No
Brownfield	1	N/1 E/2	50		18	800	13	80	R/1	No	Yes	O.O.	8	No
Brownwood	1	E/1	45	5	18	400	23	240	R/1	No	No	See #2	8	Yes
Bryan	2½	N/1 E/2	55	6	18	600	25	600	R/2½	No	No	See #3	8	Yes
Canton	1	E/1	50		36	200	25	70	R/1	No	No	O.I.	8	Yes
Carthage	1	E/1	45	5	18	900	20	250	R/1	No	Yes	O.I.	7	Yes
Castleberry	1	E/1	50	4	18	700	24	260	R/1	No	No	O.I.	8	Yes
Center	1	E/1	50	5	36	2,800	30	150	R/1	Yes	No	See #4	7-8	No

Notes are listed at the end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
Channelview	½	E/1	45	7	18	800	19	128	R/½	No	No	See #5	7-8	No
Cleburne	1	E/1	55	4	36	975	20	80	R/1	No	Yes	O.I.	7-8	No
College Station	1½	N/2	55	7		800	28	450	R/1½	No	No	O.I.	8	Yes
Commerce	1	N/1	55	6	18	500	20	200	R/1	No	Yes	See #6	8	No
Conroe	2	N/1 E/1	55	5	18	1,200	26	240	R/1	No	No	O.I.	9-12	No
Corsicana	1½	N/1 E/1	55	6	18	600	25	345	R/1½	No	Yes	O.O.	9	Yes
Crockett	1	E/1	50	7	36		14	70	R/1	No	No	See #6	7-8	No
Crosby	1	N/1	50	7	36	800	90	80	R/1	No	Yes		7-8	No
Crowley	1	E/1	50	7	18	750	22	164	R/1	No	No	O.O.I.	8	No
Dallas	28	N/4 E/24	55	7	18	800	25	6,500	R/28	No	No	O.I.	8	No
Decatur	½	E/1	52	7	18	1,000	15	90	R/½	No	No	O.O.I.	7-8	Yes
Del Valle	1	N/1	45	6	36	500	20	79	R/1	No	No	O.I.	8	No
Denton	½	E/1	60	6	18	600	15	70	R/½	No	No	O.O.	7	No
De Soto	1	E/1	55	5	18		24	243	R/1	No	No	See #5	7-8	No
Devine	1	E/1	55	7	36	2,300	14	70	R/1	No	No	O.I.	7-8	No
Donna	1	E/1	55	5	18	3,000	23	210	R/1	No	No	O.I.	9	No
Duncanville	1½	E/2	55	6	18	800	20	300	R/1½	No	No	O.I.	7-8	No
Eagle Mt.-Saginaw	1	N/1	50	7	18	400	27	245	R/1	No	No	See #6	7-8	No/8th Yes/7th

Notes are listed at the end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
East Central	1	E/1	50	5	18		29	258	R/1	No	Yes	See #5	7-8	Yes
Eden	½	E/1	60		18		19	38	R/½	No	No	O.I.	8	Yes
Edgewood	6	E/6			18/2 36/4				R/6	No	No	O.I.	7-8	Yes/1 No/5
Edinburg	4	E/4	50	5	18/7th 36/8th	5,000	100	400	R/3 VEH/1	Yes	No	See #4	7-9	No
Ennis	1	E/1	55	5	36	100	95	95	R/1	No	No	O.I.	8	No
Everman	1	E/1	45	6	18	1,100	20	235	R/1	No	Yes	O.I.	7	Yes
Forth Worth	7½	E/8	50	6-7	18	835	25	1,850	R/7½	Yes		O.I.	7-8	No
Fredericksburg	1	E/1	47	4	18	1,265	36	75	R/1	No	No	O.I.	8	No
Friendswood	1	E/1	50	7	12	500	25	300	R/1	Yes	Yes	See #5	8	Yes
Galena Park	4	N/1 E/3	60	6	36	2,250			R/4	No	Yes	O.O.	7-8 11-12	
Gatesville	1	E/1	45	4	18	600	15	130	R/1	No	Yes	O.I.	8	Yes
Gilmer	1	N/1	52	7	9	3,000	20	400	R/1	Yes	No	See #4	7-8	No
Granbury	1	E/1	55	5		600	22	120	R/1	No	No	O.I.	8	No
Grand Prairie	1	E/1	45	5	18	1,500		240	R/1	No	Yes	O.I.	8	No
Grapevine-Colleyville	1	E/1		5	9	1,200	22	220	R/1	No	Yes	O.I.	8	Yes
Greenville	1	E/1	55	5	36	400	23	115	R/1	No	No	O.I.	8	No
Hallsville	1	E/1	50	5	36	400	22	110	R/1	No	No	O.I.	7-8	No
Harlandale	4	E/4	55	5	36	1,500	21	413	R/4	No	No	O.O.I.		No

Notes are listed at the end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
Harlingen	2	E/2	55	7	18	500	23	395	R/2	No	No	See #4	8	No
Hearne	½	E/1	55		36	400	20	60	R/½	No	No	See #3	8	Yes
Hempstead	1	N/1	45	5	36	400	28	140	R/1	Yes	No	O.I.	7-8	No
Henderson	1	E/1	50		18	400	18	210	R/1	No	Yes	See #7	7	No
Hidalgo	1	E/1	60	5	36	550	15	150	R/1	No		O.I.	7-8	No
Hitchcock	1	N/1	45	7	18	200	20	120	R/1	Yes	No	O.I.	6-8	No
Houston	18	E/18	55	5	18	800	21	2,200	R/18	No	VERS	See #4	7-10	Yes/No
Howe	½	See #8	52		36	1,256	20	60	R/½	Yes		O.I.	8	No
Hudson	1	E/1	45	7	36	500	20	100	R/1	No	No	O.I.	8	Yes
Huffman	1	N/1	50		18	500	20	60	R/1	No		O.I.	8	No
Hurst-Euless-Bedford	$2^{3}/4$	N/1 E/2	55	6	18	200	25	650	R/$2^{3}/4$	No	No	O.O.	8	No
Iowa Park Cons.	1	E/1	50	7	18	1,675	18	142	R/1	No	Yes	O.O.I.	8	Yes
Irving	1	E/1	55	6	18	700	25	200	R/1	No		See #4	7	No
Jacksonville	1	E/1	45	7	36	800	20	100	R/1	No		O.I.	8	No
Karnack	½	E/1	55		36	1,100/ ½ unit	16	32	R/½	No	No	O.I.		No
Katy	3	E/3	47	7	18	1,500	15	450	R/3	No	No	See #4	8	No
Keller	1	E/1	55	5	18	700	120	240	R/1	No		OOCI	9-12	No
Kerrville	1	E/1	50	4	18	1,492	18	148	R/1	No	Yes	O.I.	8	No

Notes are listed [illegible]he end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
Kilgore	1	E/1	50	5	18	1,500	23	180	R/1	No	Yes	O.O.	7-8	No
Killeen	5	N/1 E/4	45	8	18	1,200	20	485	R/5	No	Yes	O.I.	7-8	Yes
Kingsville	2	E/2	50	5	36	1,600	18	184	R/2	Yes	Yes	O.I.	8	No
Kirbyville	1	E/1	50	5	36	600	28	128	R/1	No	Yes	O.O.I.	9	Yes
La Joya	2	E/2	45	7	36	900	26	313	R/2	No	No	O.I.	7-8	No
La Marque	2	N/1 E/1	55	7	18	1,985	26	372	R/2	Yes	Yes	See #4	8	Yes
La Vega	1	E/1	50	7	36	1,000	19	87	R/1	No	No	O.I.	8	No
Leander	2	E/2	50		18	300	35	70	R/2	No	No	O.O.	8	No
Levelland	1	E/1	55	6	18	1,000	18	145	R/1	No	Yes	O.I.	8	No
Lewisville	3	N/2 E/1	55	5	18	800	30	900	R/3	No	No	O.I.	8	Yes
Liberty-Eylau	1	E/1	50	5		600	20	160	R/1	No	Yes	O.I.	8	No
Lindale	½	E/1	60		18		25	150	R/½	No	No	See #4	9&11	Yes
Little Elm	½	N/1	55	7	36	750	18	54	R/½	No	No	O.I.	8	Yes
Lockhart	1	E/1	45	7	18	500	23	200	R/1	No	Yes	O.I.	8	Yes
Longview	1	E/1	54	7	18	560	14	130	R/1	No	No	O.I.	8	No
Mansfield	1	E/1	55	5	9	300	21	235	R/1	No	No	O.I.	8	Yes
Marlin	1	E/1	55	4	18	400	18	150	R/1	No	No	O.I.	8	Yes
Marshall	2	N/2	45	7	18	1,600	18	500	R/2	No	No	O.I.	8	No

Notes are listed at the end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
McAllen	5	N/1 E/4	50/JH 55/HS	6&7	36/3 12/2	400-600	25	750	R/5	No	No	See #9	7-10	Yes/No
Mexia	1	N/1	60	6	36	1,200	16	75	R/1	No	No	O.I.	8	No
Midway	1	E/1	55	4	36	1,500	22	80	R/1	No	No	O.I.	7-8	No
Mission	1	N/1	50	7	18	1,000	27	258	R/1	No	No	See #10	7-8	No
Mt. Pleasant	1	E/1	55	7	36	3,000	22	100	R/1	No	No	O.O.	7-8	No
Nacogdoches	1	E/1	50	7	18	1,023	25	125	R/1	No	Yes	O.I.	7-8	No
New Caney	1	E/1	45	7	36	800	25	125	R/1	No	VEES	O.I.	8	No
North East	1	E/1	45	7	9	900	20	252	R/1	No	Yes	O.I.	7	Yes
North Forest	4	E/4	55	5	18	400	26	800	R/4	No	No	O.I.	7-8	No
North Lamar	1	N/1	45	6	18	1,400	16	201	R/1	No	No	O.I.	8	Yes
Northside	11½	N/4 E/8	50	5	12	800	15	2,500	R/11½	No	No	O.I.	8	Yes
Northwest	1	N/1	55	4			31	183	R/1			O.I.	7-11	No
Odem-Edroy	1	E/1	50	7	36	2,000	23	92	R/1	Yes	Yes	O.O.	8	Yes
Palacios	1	E/1	55	5	36	1,400	15	80	R/1	No	No	O.I.	7-8	No
Palestine	1	E/1	45	6	18	400	21	250	R/1	No	No	O.I.	8	Yes
Paris	2	E/2	50	7	36	1,475	22	198	R/2	Yes		O.I.	7-8	No
Pharr-San Juan-Alamo	3	E/3	55	6	18	800	30	600	R/3	No		O.O.I.	8	No
Pittsburg	1	N/1	53	4	18		15	121	R/1	Yes	Yes	See #11	6-8	No

Notes are listed [illegible]he end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
Plano	10	N/1 E/9	50	7	18	800	27	2,500	R/10	No	Yes	See #6	8	Yes
Pottsboro	½	E/1	55	7	36	200	35	140	R/½	Yes	No	O.I.	8	Yes
Raymondville	1	E/1	48	6	18	600	8	100	R/1	No	Yes	O.O.	7-8	No
Rio Hondo	1	N/1	55	6	18	50	16	16	R/1	Yes	No	See #6	9&12	No
Robstown	1	E/1	55	5	18	1,400	17	150	R/1	No	No	O.I.	9-12	No
Rockdale	1	N/1	55	5	18		25	160	R/1	No	No		8	Yes
San Angelo	2	E/2	50	7	6	600	25	550	R/2	No	No	O.O.	7-8	
San Benito	1	E/1	55	5	16	1,000	25	250	R/1	No	Yes	O.I.	7-8	No
San Felipe-Del Rio	2		45	7	18	750	86	340	R/2	No	No	O.I.	7-8	No
San Marcos	1	E/1	45	7	18	1,000	20	200	R/1	No	No	O.I.	8	No
Santa Fe	1½	E/2	55	6	18	1,250	23	150	R/1½	Yes	No	O.I.	7-8	No
Sherman	2	E/2	50	7	18	500	25	500	R/2	No		O.O.	8	Yes
Silsbee	1	N/1	50	7	18	500	20	212	R/1	No	Yes	O.I.	8	No
Socorro	2	N/2	55	6	18	4,000	25	525	R/2	No	Yes	O.I.	8	Yes
Somerset	1	E/1	60	5	18	1,000	14	100	R/1	No	No	O.I.	8-12	No
Southside	1	E/1	45	5	36	800	15	60	R/1	No	No	O.I.	7-8	No
Southwest	1	E/1	55	5	18	2,000		300	R/1	No	Yes	O.I.	7-8	No
Spring	3	E/3	50	7	18	800	25	70	R/3	No	Yes	See #5	7-8	No

Notes are listed at the end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
Springtown	1	E/1	55	5	18	506	15	140	R/1	No	Yes		8	
Stephenville	1	E/1	55	7	18	800	16		R/1	Yes			7-8	No
Sulphur Springs	1	E/1	55	6	18	575	21	210	R/1	No	No	O.I.	8	No
Taylor	1	E/1	55	5	18	1,200	18	180	R/1	No	Yes	O.I.	9	Yes
Temple	3	E/3	45	8	9-18	800	18	150	R/3	No	No	O.I.	6-8	Yes/No
Texas City	1½	E/2	55	5	18	800	25	400	R/1½	No	No	See #5	7	No
Tyler	2	E/2	45	5	36	600	17	200	R/2	No			7-8	No
United	1	E/1	50	6	18	435	30	290	R/1	Yes	No	O.I.	8	No
Van Alstyne	½	See #8			36	617	32	64	R/½	No		O.I.	8	Yes
Victoria	3	E/3	50	7	18	150	21	610	R/3	No	Yes	O.I.	7-8	No
Waller	1	E/1	45	7	36	800	17	81	R/1	No	Yes	O.I.	8	No
Waxahachie	1	E/1	55	7	18	1,090	20	200	R/1	No	Yes	O.I.	7-8	No
Weatherford	2	N/1 E/1	48	10	18	600	22	407	R/2	No	Yes	O.I.	8	Yes
Weslaco	2	N/2	55	6/1 7/1	18/1 36/1		25	275	R/2	No		See #4	8-11	No
West Oso	1	N/1	45	6	36	736	175	100	R/1	No	No	O.I.	8	No
Whitehouse	1	E/1	55	5	18		20	200	R/1	No	No	O.I.	8	Yes
White Settlement	1	E/1	50	6	18	400	23	274	R/1	Yes	Yes	O.I.	8	Yes
Whitesboro	1	E/1	55		12	100+ travel	30	90	R/1	Yes	No	O.I.	8	Yes

Notes are listed at the end of the table

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	CLASS NAME	GRADE OF STUDENTS	REQUIRED
Whitewright	½	E/1	55		36	500	20	40	R/½	No	Yes	O.O.	8	Yes
Willis	1	E/1	60		36		20	65	R/1	No	Yes	O.I.	8	No
Wills Point	1	N/1	55	5	36	225	25	125	R/1	No	No	O.I.	8	Yes
Wlmer-Hutchins	1	E/1	55	7	18	1,320	25	230	R/1	Yes	No	O.I.	7-8	No
Windham	3	E/3				1,400	35		R/3	Yes	No	O.I.	Other	No

Notes

1. $2.00 per student (flexible)
2. Occupational Investigation by students; Career Education by administrators
3. Career Orientation
4. Career Investigation
5. Careers
6. Career Education
7. Occupations
8. One experienced teacher shared by Howe I.S.D. and Van Alstyne I.S.D.
9. Occupational Orientation at the High School; Career Investigation at the Junior High
10. Job Orientation
11. Occupational Survey

TABLE XLIV

OCCUPATIONAL EXPLORATION PROGRAM DATA REPORTED BY INDIVIDUAL LOCAL EDUCATION AGENCIES

ISD	NUMBER OF UNITS	TEACHING EXP.	LENGTH OF CLASS	TOTAL SCHOOL PERIODS	LENGTH OF CLASS	BUDGET	AVE. # OF STUDENTS PER CLASS	TOTAL # OF STUDENTS	TYPE OF UNIT	CLASS REPEAT ?	RESEARCH FOLLOW-UP	GRADE OF STUDENTS
Bryan	1	E/1	55	6	36	1,200	15	70	R/1	No	No	9
Dallas	23	N/2 E/21	45/9 90/14	7	18/2 36/21	1,000	15	2,000	R/21 VEH/2	No	No	9-10
Decatur	½	N/1	55	6	18	1,000	12	70	R/½	No	No	9
Edgewood	1	E/1	55	6	36				R/1	No		9-10
Edinburg	2	N/1 E/1	55	5	18/1 36/1	3,000		260	R/2	No	No	9
Fort Worth	10½	N/10 E/2	55	See #1	18	2,280	30	1,654	R/10½	No	No	9-12
Galena Park	2	N/2	180	6	36	2,000	12		VEH/2	No	Yes	11-12
Grapevine-Colleyville	1	E/1	55	5	9	1,200	22	220	R/1	No	Yes	8
Greenville	2	E/2	55	5	36	3,000	50	100	R/2	No	Yes	9-10
Harlandale	2	N/1 E/1	55	5	36	5,000	63	136	R/2	No	No	9
Houston	8	N/3 E/5	55	5	18/3 36/6	800	20	600	R/8	No	Yes	9-11
North East	1	E/1	45	4		3,000	17	80	R/1	No	No	9
Pharr-San Juan-Alamo	1	E/1	55	4	36	800	20	80	R/1	No		9
San Felipe-Del Rio	2	N/1 E/1	55	6	18	2,550	75		R/2	No	Yes	9
Santa Fe	1	E/1	110	4	36	2,400	10	18	VEH/1	Yes	No	7-12
Wichita Falls	½	N/1	110	6	36		25	24	R/½	No	No	9

Note

1. Eleven schools have 6 periods a day and one school has 7 periods a day

Experience of Occupational Orientation Teachers

As reported by the local education agencies and presented in Table XLV, 17.7 percent of the occupational investigation teachers teaching during the 1983-1984 school year were teaching occupational investigation for the first time. (This did not mean that they were necessarily neophyte teachers. Some had teaching experience in other disciplines.) Considerably more, 36.0 percent of the occupational exploration teachers were teaching for the first time. This difference was most likely the result of the "new" computer exploratory courses being offered for the first time. The variations between number of units and number of teachers were caused by partial units compared to complete teachers, or in some cases, "shared" teachers.

TABLE XLV

EXPERIENCE OF OCCUPATIONAL ORIENTATION
TEACHERS FOR 1983-1984 SCHOOL YEAR

Program	Frequency	Percentage
Occupational Investigation		
New	50	17.7
Experienced	233	82.3
Total	283	100.0
Occupational Exploration		
New	22	36.0
Experienced	39	64.0
Total	61	100.0

Instructional Characteristics of Occupational Orientation Units

To determine the "structure" or instructional characteristics of the local units the following questions were asked.

1. How many minutes in length is an Occupational Investigation/Exploration class?

2. What is the total number of periods a day in the school(s) having Occupational Investigation/Exploration?

3. How many weeks in length is an Occupational Investigation/Exploration course of study?

4. Approximately how much money is budgeted for Occupational Investigation/ Exploration instructional supplies per unit?

5. What is the average number of students in an Occupational Investigation/ Exploration class?

6. Approximately how many students will complete Occupational Investigation/ Exploration for the entire 1983-1984 school year?

7. What is the local name of the Occupational Investigation class used by the district (i.e., Career Investigation, etc.)?

8. What is the grade level of students enrolled in Occupational Investigation/Exploration?

9. What cluster(s) are covered by your Occupational Exploration unit(s)?

10. What do you perceive as the purpose of Occupational Investigation/ Exploration in the district?

11. Has the district completed any type of evaluation, follow-up or research on the effectiveness of Occupational Investigation/Exploration?

As listed in Table XLIII, page 111, the length of occupational investigation classes ranged from forty-five to sixty minutes. Of those that responded, 49.5 percent or 130 units, had occupational investigation classes that were fifty-five minutes in length. The mean for all of the units was 52.02.

The same data for occupational exploration is presented in Table XLVI. The occupational exploration classes ranged from 45 to 180 minutes in length. This large variation is explained by the fact that occupational exploration can be offered as a multi-period laboratory.

TABLE XLVI

LENGTH OF OCCUPATIONAL EXPLORATION CLASSES IN MINUTES

Length of Class	Frequency	Percentage	Mean
45 minutes	10.0	17.09	
55 minutes	31.0	53.00	
90 minutes	14.0	23.93	
110 minutes	1.5	2.56	
180 minutes	2.0	3.42	
Totals	58.5	100.00	67.35

To determine what the organizational framework was for schools offering Occupational Orientation courses, the respondents were asked to identify how many instructional periods a day were offered by the schools. The responses ranged from four to ten for occupational investigation and four to seven for occupational exploration. For both Occupational Orientation courses, seven periods a day was the most common (Table XLVII).

TABLE XLVII

FREQUENCY AND PERCENTAGE SCORES FOR NUMBER OF PERIODS A DAY FOR OCCUPATIONAL INVESTIGATION AND OCCUPATIONAL EXPLORATION UNITS

Periods	Frequency	Percentage
Occupational Investigation		
4	12	4.78
5	88	35.06
6	40	15.93
7	101	40.24
8	8	3.19
10	2	.80
Total	251	100.00
Occupational Exploration		
4	3	5.13
5	15	25.64
6	17	29.06
7	23.5	40.17
Total	58.5	100.00

Another question was asked to ascertain instructional time. Table XLVIII presents the data denoting the number of weeks that the occupational investigation and occupational exploration courses were offered. The responses ranged from a part of a semester, six weeks, to a full school year, thirty-six weeks. The majority of occupational investigation classes were eighteen weeks in length and the majority of occupational exploration courses were thirty-six weeks.

TABLE XLVIII

LENGTH OF COURSE FREQUENCY AND PERCENTAGE SCORES FOR OCCUPATIONAL INVESTIGATION AND OCCUPATIONAL EXPLORATION

Length of Class	Frequency	Percentage
Occupational Investigation		
6 weeks	2.0	.75
9 weeks	5.5	2.07
12 weeks	15.5	5.84
16 weeks	1.0	.38
18 weeks	180.5	67.98
36 weeks	61.0	22.98
Total	265.5	100.00
Occupational Exploration		
9 weeks	1.0	1.71
18 weeks	19.0	32.48
36 weeks	38.5	65.81
Total	58.5	100.00

The individual amounts budgeted by local education agencies for occupational investigation and occupational exploration instructional supplies are listed in Tables XLIII and XLIV, respectively (see pages 111-120). The amounts budgeted for occupational investigation ranged from a low of $50.00 per unit to a high of $5,000.00. The mean was $996.71 per unit. The range for occupational exploration was $800.00 to $5,000.00 and the mean for 57 units was $1,641.05. The mode for occupational investigation was $800.00. Ninety-two and a half units had that amount budgeted. This figure represented 36.42 percent of the reported units. Twenty-three and a half units or 41.23 percent of occupational exploration had $1,000 budgeted for instructional supplies. This was the mode.

Two questions were asked pertaining to numbers of students enrolled in the Occupational Orientation courses. The first asked for an average amount of students per class. For occupational investigation, five was the lowest number and 175 was the highest. (There were ten units reporting 86 to 175 students per class. (The respondents may have interpreted the question as meaning the average number of students for all the classes.) Because of this questionable data a mean was not computed. Twenty-five students per class was the mode. The figure represents 26.82 percent of the 261 units described.

The average number of students for occupational exploration ranged from ten to seventy-five with fifteen students per class being the mode. The mode represented 43.24 percent of the 55.5 units described. There were six units reported as having fifty to seventy-five students per class. These high numbers may have affected the mean which was 23.829 students per class.

When asked for an approximation of the total number of students who would complete the classes for the 1983-1984 school year, the numbers for occupational investigation ranged from 16 to 6,500. Because the survey instrument did not specify per unit or district-wide, it would be difficult to establish measures of central tendency. The same was true for occupational exploration. The range for occupational exploration was 18 to 2,000.

"Occupational Investigation" was the most common title given to the course by local education agencies. However, as noted in Table XLIII, there were nine variations of this title used by 65.5 units or 24.62 percent of those reporting a name for the class.

Table XLIX contains the career areas covered by the occupational exploration units. Nineteen classifications were listed by the respondents. These represent thirteen of the original U.S.O.E. cluster classifications. The two clusters not represented were marine science and environment.

TABLE XLIX

CAREER AREAS COVERED BY INDIVIDUAL OCCUPATIONAL EXPLORATION PROGRAMS

Titles

1. Business and Office
2. Car Care
3. Communications
4. Computer Related Careers
5. Construction Trades
6. Consumer and Homemaking Education
7. Electronic Technologies
8. Food and Related Services
9. Health
10. Horticulture
11. Hospitality Industries
12. Industrial
13. Law Enforcement and Criminal Justice
14. Manufacturing
15. Marketing and Distribution

TABLE XLIX--Continued

Titles

16. Motor Transportation Technology
17. Personal Services
18. Public Services
19. Visual Performing Arts

Respondents were asked if their districts had completed any type of evaluation, follow-up or research on the effectiveness of Occupational Orientation. Of the 149 districts, 134 responded to the question for occupational investigation and 14 of the 16 districts responded for occupational exploration. The percentages of districts not completing any type of evaluation, etc. for both occupational investigation and occupational exploration were similar.

TABLE L

FREQUENCIES AND PERCENTAGES FOR DISTRICTS COMPLETING RESEARCH, EVALUATIONS OR FOLLOW-UP ON THEIR OCCUPATIONAL ORIENTATION PROGRAMS

Unit	Missing	Yes		No	
		Number	Percentage	Number	Percentage
Occupational Investigation	15	49	36.6	85	63.4
Occupational Exploration	2	5	35.7	9	64.3

Although the exact number is not known, several of the evaluations completed were to comply with the V.E.E.S. Two of the respondents for occupational investigation reported that their evaluations were from the V.E.E.S.

Occupational Orientation Student Populations

Four questions were asked to determine the types of students being served by individual units at the local level. The questions are as follows:

1. Prioritize the list of special student populations based on the percentage taking Occupational Investigation/Exploration.
2. What is/are the type(s) of Occupational Investigation/Exploration unit(s)? (Regular or V.E.H.)
3. Can students who have successfully completed Occupational Investigation/Exploration repeat the class?
4. Is Occupational Investigation a required course?

Respondents were asked to rank five special student populations according to the numbers enrolled in occupational investigation and occupational exploration. Table LI presents those populations in rank order.

TABLE LI

SPECIAL POPULATIONS SERVED BY LOCAL OCCUPATIONAL ORIENTATION PROGRAMS

Population	Rank	
	Occupational Exploration	Occupational Investigation
Disadvantaged	1	1
High Academic	2	2
Special Education	3	4
Limited English Proficiency	4	3
Handicapped	5	5

The largest number of special population students being served were disadvantaged students and the smallest number were handicapped.

Overall, as reported in Tables XLIII and XLIV, there were only three V.E.H. units reported for occupational investigation and five V.E.H. units for occupational exploration. By percentage, these figures represent 1.5 percent of all occupational investigation units and 8.5 percent of all occupational exploration units.

There were fifteen different grade combinations given in response to what is/are the grade level(s) of students taking occupational investigation. The grades ranged from sixth to twelfth. The greatest response was eighth grade. One-hundred and thirty-four units or 49.91 percent were for eighth grade only. The next highest response was seventh and eighth, with 71.5 units or 26.63 percent. Approximately 22, or 8.19 percent of the reported units were available for students in grades nine through twelve. The individual responses for each school district are presented in Tables XLIII and XLIV.

Only one school district reported that students who had successfully completed occupational exploration could repeat the course. However, 24 of the 148 school districts responding to the question allowed students to repeat occupational investigation in some or all of their units. This figure represents 16.2 percent of the school districts. Fifty-two of the 146 (35.6 percent) districts responding reported that occupational investigation was required in all or some of the units in the districts. In 1980, 44 percent of the occupational investigation units were required. None of the occupational exploration units are currently required.

Perceived Purpose of Occupational Orientation

Respondents to the occupational exploration and occupational investigation questionnaire were asked their perceived purpose of the courses. Due to the large number of responses on the occupational investigation questionnaire, data are presented in a content analysis form. To be classified into a "response category," responses had to be worded almost identically. The responses to the occupational exploration questionnaire are quoted verbatim.

As reported in Table LII, two major purposes as perceived by local education agency personnel for occupational investigation were identified--career awareness and career guidance. Many responses referred directly to career awareness, career skills, fifteen cluster awareness, and occupational choices. There were also a great many responses made to educational planning and training options. The third, although less mentioned purpose, was identified by comments relating to students acquiring self awareness and decision-making skills. One district reported that an introduction to computer literacy was being included in some of their occupational investigation units.

The responses for occupational exploration are in Table LIII. Providing students with "hands-on" experiences was the recurring theme in the responses. Four of the responses mentioned the course serving as a "feeder" for other vocational or specific training courses in high school. Two of the comments reflected a skill training purpose as opposed to an exploratory endeavor. However, these comments were made for V.E.H. units.

TABLE LII

RESPONSES TO: "WHAT DO YOU PERCEIVE AS THE PURPOSE OF OCCUPATIONAL INVESTIGATION IN THE DISTRICT?" BY RANK ORDER

Rank	Number of Responses	Response
1	65	Career awareness.
2	26	To learn about courses which will assist students in planning and achieving their tentative career choices for high school, college and the world of work.
3	23	This course helps the eighth grader plan his/her four-year program for high school.

TABLE LII--Continued

Rank	Number of Responses	Response
4	21	Help students in making occupational choices and wise career decisions.
5	16	Assist students in discovering their vocational interests and in determining their occupational and educational aptitudes.
6	15	Acquaint students with the fifteen occupational clusters.
6	15	It is a guidance activity to prepare students to have a greater understanding of educational options.
7	11	To prepare students to begin career and educational planning and goal setting.
7	11	To expose students to the skills and education necessary to enter different career areas.
7	11	To introduce students to the vocational course offerings in the district.
7	11	Awareness of occupational requirements and training opportunities.
8	9	Enable the student to establish a positive realistic concept of him/herself and how he/she relates to others.
9	8	Gives students an awareness of the need to make long-range decisions.
10	5	To stimulate students to investigate the careers that interest them.
11	4	To develop a positive attitude toward work (the work ethic).
12	3	Provides direct experience through resume writing, interviews with business people. completing a job application.
13	2	Serve other than college bound.
14	2	Helps students become aware of their limitations and abilities.
15	1	To learn about job seeking skills.
15	1	To enhance the knowledge of the student with regard to purposes of occupational investigation (educational planning, clusters of job information) to the extent that preparation for job selection in the future will be valid.
15	1	To provide skills necessary for a student to find, enter, maintain, and/or change a chosen career.

TABLE LII--Continued

Rank	Number of Responses	Response
15	1	To give students an opportunity to receive specific information regarding the world of work from finding or selecting the job to being successful and keeping it.
15	1	In some schools introduction to computer literacy is included.
15	1	How to function as a productive member of society.
15	1	Prepare students to prepare for understanding that they are responsible for their lives--the quality of their life will depend on how they prepare themselves. Self control is a major factor in the maturation process and a factor in developing goals.
15	1	Underscore the necessity of a good basic education; motivate students to achieve excellence in all that they do.
15	1	We offer equal opportunity to all students. All students can learn, but education is something you earn and students need to be constantly encouraged to provide the sweat, blood and tears if necessary.
15	1	Study what will be the future growth in employment in the field of interest.
15	1	To make students knowledgeable of the economic and societal factors which influence occupational programs and careers which will assist in the planning at achieving their tentative career choices.
15	1	Occupational investigation is an elective where students are forced to take the course because there isn't anything else to offer them. This year art was not offered to eighth grade students. It seems to me that it has been misused in some ways.
15	1	To make students aware of the wide range of careers available and the working conditions and desired employee traits relating to each career.
15	1	Mainly as an elective course
15	1	Introduce work, jobs, careers, decisions; explore, see, hear, think, consider, plan and replan, evaluate, hear advice.

TABLE LIII

RESPONSES TO: "WHAT DO YOU PERCEIVE AS THE PURPOSE OF OCCUPATIONAL EXPLORATION IN THE DISTRICT?"

Number	Response
1.	Give "hands on" laboratory skills training to special population students interested in following a career in personal services; i.e., gardening and grounds upkeep, custodial services, animal care, etc.
2.	To give students "stalled" in junior high school the opportunity to progress to the ninth grade. Upon successful completion of occupational exploration, the student will move into CVAE courses in the tenth grade.
3.	Help students to determine their interest or disinterest in office occupations.
4.	Provides a ninth-grade course that allows students "hands on" experience in the construction trades clusters so they may possibly choose a career in that cluster.
5.	To provide emphasis in the career cluster the student has chosen to pursue. As a foundation course before taking specialized courses in there (sic) field of specialization.
6.	Provide information and some hands on experience to help students make good career choices.
7.	To provide students with a hands on opportunity to explore the fields of carpentry and metal. To learn basic shop safety and to get more in-depth knowledge of the skills required in the construction industry. Hands-on application is still the best way to discover interests and aptitude. Thus, these students are better prepared to select the specific skill program in high school that meets their individual needs.
8.	Career awareness for students by activities in exploring occupational interests, aptitudes, and goal setting.
9.	Gainful employment.
10.	We use ours as an in-depth exploration of computer careers and computer literacy. The reception to the program has been outstanding. Principals and students like it very much.
11.	Prepare students for entering higher level vocational courses.
12.	To provide exploratory activities with "hands on" and cognitive experiences to assist students in making occupational and educational decisions.
13.	To help students make decisions about whether or not to study further for a career cluster. It also gives an opportunity to become aware of the levels of employment within a cluster and teaches an awareness of career ladders.
14-16	Missing.

Occupational Orientation Program Survey

The data collected with the Occupational Orientation Program Survey were gathered confidentially. Respondents were asked to identify themselves by professional title so that variations in perceptions could be noted. Table LIV contains the frequency and percent of professional groups.

TABLE LIV

FREQUENCY AND PERCENT OF PROFESSIONALS RESPONDING
TO THE OCCUPATIONAL ORIENTATION PROGRAM SURVEY

Title	Frequency	Percent
Administrators	14	10.4
Teachers and Counselors	32	23.7
Vocational Administrators	89	65.9
Totals	135	100.0

There were seven professional titles listed along with a place to enter a title other than the seven listed. Teachers, regular counselors and vocational counselors were in one group, superintendents and principals in the second and vocational directors and supervisors in the third.

Evaluation Section

On the "Confidential" questionnaire respondents were asked to react to eight questions pertinent to their Occupational Orientation programs at the local level. Tables LV, LVI and LVII contain the frequency and percent for each of the five response spaces and the mean scores for teachers and counselors, administrators, and vocational administrators.

A comparison of the mean scores of all three groups reveals some general patterns in the scores. Vocational administrators had the lowest mean scores on five of the eight statements. Teachers' mean scores were highest on every statement with the exception of statement three. Administrators were lowest on three, highest on one, and in the middle on the remaining four.

Question 1 was asked to obtain the perceptions of how clear the Texas Education Agency Program objectives were for Occupational Orientation. Based on the mean scores of the three groups, teachers and counselors found the program goals

BEST COPY AVAILABLE

TABLE LV

MEANS, FREQUENCIES AND PERCENTAGES OF TEACHER AND COUNSELOR RESPONSES TO THE CONFIDENTIAL SURVEY

1. How clear are the Texas Education Agency's Program Objectives for Occupational Orientation?

M= 4.147

Very Clear 12/35.3 17/50.0 3/8.8 2/5.9 0/0 Not Clear

2. How effective is the Occupational Orientation Program in meeting the occupational information needs of all types of students?

M= 3.943

Very Effective 8/22.9 18/51.4 18/22.9 1/2.8 0/0 Not Effective

3. How strong is your Occupational Orientation Program?

M= 4.114

Very Strong 13/37.1 13/37.1 9/25.8 0/0 0/0 Weak

4. To what degree is Occupational Orientation being used to increase non-traditional enrollment in vocational education classes?

M= 3.719

A Great Deal 7/21.9 11/34.4 12/37.5 2/6.2 0/0 Not At All

5. How much are high school counselors involved in the Occupational Orientation Program?

M= 3.182

A Great Deal 6/18.2 11/33.3 6/18.2 3/9.1 7/21.2 Not At All

6. How well is the Occupational Orientation Program understood by the academic teachers?

M= 3.471

Very Well 6/17.6 11/32.4 12/35.3 3/8.8 2/5.9 Not At All

7. Is the Occupational Orientation Program used as a "dumping ground" to place students who are not succeeding in other classes?

M=2.030

Very Often 2/6.1 2/6.1 7/21.1 6/18.2 16/48.5 Never

8. How well are the teachers in the Occupational Orientation Program trained?

M=4.152

Very Well 15/45.5 12/36.4 3/9.1 2/6.0 1/3.0 Poorly

TABLE LVI

MEANS, FREQUENCIES AND PERCENTAGES OF OTHER ADMINISTRATOR RESPONSES TO THE CONFIDENTIAL SURVEY

1. How clear are the Texas Education Agency's Program Objectives for Occupational Orientation?

M= 3.769

Very Clear 3/23.1 5/38.4 4/30.8 1/7.7 0/0 Not Clear

2. How effective is the Occupational Orientation Program in meeting the occupational information needs of all types of students?

M= 3.928

Very Effective 5/35.7 5/35.7 2/14.3 2/14.3 0/0 Not Effective

3. How strong is your Occupational Orientation Program?

M= 4.143

Very Strong 5/35.8 7/50.0 1/7.1 1/7.1 0/0 Weak

4. To what degree is Occupational Orientation being used to increase non-traditional enrollment in vocational education classes?

M= 2.214

A Great Deal 1/7.1 2/14.4 1/7.1 5/35.7 5/35.7 Not At All

BEST COPY AVAILABLE

TABLE LVI—Continued

5. How much are high school counselors involved in the Occupational Orientation Program?
M= 2.143
A Great Deal 0/0 2/14.3 3/21.4 4/28.6 5/35.7 Not At All

6. How well is the Occupational Orientation Program understood by the academic teachers?
M= 3.429
Very Well 4/28.6 1/7.1 6/42.9 3/21.4 0/0 Not At All

7. Is the Occupational Orientation Program used as a "dumping ground" to place students who are not succeeding in other classes?
M= 1.538
Very Often 1/7.7 0/0 1/7.7 1/7.7 10/76.9 Never

8. How well are the teachers in the Occupational Orientation Program trained?
M= 3.929
Very Well 3/21.4 8/57.1 2/14.3 1/7.2 0/0 Poorly

TABLE LVII

MEANS, FREQUENCIES AND PERCENTAGES OF VOCATIONAL ADMINISTRATOR RESPONSES TO THE CONFIDENTIAL SURVEY

1. How clear are the Texas Education Agency's Program Objectives for Occupational Orientation?
M= 3.741
Very Clear 24/28.2 31/36.5 17/20.0 8/9.4 5/5.9 Not Clear

2. How effective is the Occupational Orientation Program in meeting the occupational information needs of all types of students?
M= 3.833
Very Effective 22/26.2 34/40.5 21/25.0 6/7.1 1/1.2 Not Effective

3. How strong is your Occupational Orientation Program?
M= 3.738
Very Strong 23/27.4 31/37.0 20/23.8 5/5.9 5/5.9 Weak

4. To what degree is Occupational Orientation being used to increase non-traditional enrollment in vocational education classes?
M= 3.424
A Great Deal 12/13.9 24/27.9 38/44.2 9/10.5 3/3.5 Not At All

5. How much are high school counselors involved in the Occupational Orientation Program?
M= 2.905
A Great Deal 12/14.3 15/17.9 26/30.9 15/17.9 16/19.0 Not At All

6. How well is the Occupational Orientation Program understood by the academic teachers?
M= 2.800
Very Well 7/8.2 13/15.3 28/33.0 30/35.3 7/8.2 Not At All

7. Is the Occupational Orientation Program used as a "dumping ground" to place students who are not succeeding in other classes?
M= 2.118
Very Often 3/3.5 8/9.4 18/21.2 23/27.1 33/38.8 Never

8. How well are the teachers in the Occupational Orientation Program trained?
M= 3.774
Very Well 25/29.8 30/35.7 18/21.4 7/8.3 4/4.8 Poorly

most clear. Of those that responded, 85.3 marked the two highest response columns next to the "very clear" response. Administrators' and vocational administrators' mean scores were 3.77 and 3.74, respectively. Only 15.3 of the vocational administrators found the objectives not clear as opposed to 64.7 who did.

Question 2 on the effectiveness of Occupational Orientation in meeting the occupational information needs of all types of students displayed the most consistency in the mean scores with very little variance between the three groups. All three means approached the "fourth step" toward the "very effective" end.

Question 3: "How strong is your Occupational Orientation program?" received the most positive scores, reflected by high means from all three groups. Administrators' and teachers' and counselors' mean scores were over 4.0, one step below the "very strong" end. Administrators had the highest means, teachers and counselors next, and vocational administrators the lowest of the three groups with a mean score of 3.74.

The largest difference in mean scores was for question 4: "To what degree is Occupational Orientation being used to increase non-traditional enrollment in vocational education classes?" The administrators' mean score was 2.21, one step above the "not at all" end. Of those that responded, 71.4 percent marked the two columns toward the negative end. Compared to the teachers' and counselors' mean score of 3.72, the difference was 1.51. Vocational administrators' mean score was 3.42. Only 6.2 percent of the teachers and counselors and 14 percent of the vocational administrators responded negatively.

Question 5: "How much are high school counselors involved in the Occupational Orientation program?" displayed the same pattern as question 4. It was also the question that received the lowest mean scores reflecting a negative response from all three groups. The administrators' mean score was 2.14, again one step above the "not at all" response. The frequency scores show 64.3 percent of their responses at the negative end. The difference between their mean score and the mean score of teachers and counselors was 1.04. Thirty percent of the teachers and counselors responded at the negative end which was similar to the frequencies reported by vocational administrators, 36.9. None of the mean scores for this statement went above the midpoint of the scale.

There was some variation between the mean scores of vocational administrators when compared to the means of the other two groups on Question 6: "How well is the Occupational Orientation program understood by the academic teachers?" The mean score for vocational administrators was 2.80 which was below the midpoint level. A total of 43.5 percent responded in the two columns toward the "not at all" response. The other means were below the 3.5 level.

Question 7: "Is the Occupational Orientation program used as a 'dumping ground' to place students who are not succeeding in other classes?" was the only question in which a low mean score reflected a positive response. The mean scores were consistently low. There was, however, a difference of .5 or slightly more between teachers and counselors and vocational administrators when compared to the 1.53 mean of administrators. This mean falls in the lowest step or at the "never" end.

Responses were positive as reflected by the mean scores for Question 8: "How well are teachers in the Occupational Orientation Program Trained?" Teachers and counselors had the highest mean, 4.15 and vocational administrators had the lowest of 3.77, although this mean approached the fourth step toward the "very well" end. Only three teachers and counselors, eleven vocational administrators and one administrator responded negatively to this question.

The educational professionals who filled out the confidential survey were asked to respond to four open-ended questions. To allow for the different perceptions held by individual professional groups, the remarks are presented in three tables. The comments received from teachers and counselors are found in Table LV. Administrators' (other than vocational administrators) remarks are in Table LVI . Table LVII details the remarks made by vocational administrators.

Looking at the comments over-all, there were two major problem levels. Some of the comments referred to problems that could be solved within the local agencies and others referred to difficulties that need solutions instigated externally. However, from the comments it appeared that some of the respondents believe that their internal problems should be handled externally.

Internal Problems

Internal problems were those difficulties identified by the respondent that could be better corrected at the local level, although outside support could help in some cases. Many times the problems were indigenous to a particular local education agency or a type of local education agency. Lack of adequate teaching facilities and classroom size were referred to often. Large class size was mentioned many more times than small class size. However, problems of scheduling, competition with other electives, the requirements of House Bill 246 and emphasis on academics were mentioned as present or impending negative influences on student enrollment in occupational investigation. Poor teaching facilities, lack of equipment, and the necessity of using "floating" teachers were described as being problems.

TABLE LVIII

RESPONSES FROM TEACHERS AND COUNSELORS ON THE "CONFIDENTIAL" EVALUATION SURVEY

QUESTION NUMBER	QUESTION AND RESPONSES
1.	WHAT PROBLEMS ARE YOU AWARE OF THAT THE OCCUPATIONAL ORIENTATION TEACHERS HAVE IN TEACHING CLASSES?
	Class size at times; scheduling of time - need time in Summer to arrange field trips and guest speakers
	The demand for the class is increasing and the addition of another unit would help
	The teaching module on the occupational clusters does not seem to have enough variety and diversity to maintain the student's interest
	A problem in really introducing and covering the clusters without getting too bogged down in facts and figures and the class getting bored
	No major problems
	No textbook, availability of materials
	None, except for the usual things: discipline, laziness, not caring - for some students, not all
	Class size too large for many "non-academic" activities such as role playing games and field trips; many seventh graders are not mature enough for some of the concepts; full year classes are too long - semester would be better
	Not enough time for field trips; not enough knowledge of all occupations
	In the beginning materials were a short delay, but presently Occupational teachers are having no problems
	They need to be able to teach six classes so that all students may take the class
	Very few problems, if any
	There is no problem with this course except trying to make the cluster section interesting
	Too many students miss class due to extracurricular sports activities and pep rallies
	Number of students per class too large
	Lack of adequate materials (money)
	A few of the academic teachers do not understand the importance of Occupational Orientation and this can cause problems at times
	It isn't a required course, some students are put in the program and are not interested in learning and will say that it does not matter if they pass or fail since it is just an elective. The teacher has no way of getting them out of the class. Also, not enough audio-visual equipment.
	Ours is only a 12 week course - we could really use more time to cover the material adequately. Could use more funds for purchasing materials.
	In our area enough time for field trips to observe different occupations
	Current updated materials

QUESTION NUMBER	QUESTION AND RESPONSES
	None if they have a vocational guidance background or if they have had the deficiency courses before starting to teach occupational investigation
	Seventh and sometimes eighth grade students have not been exposed to words like "resume" and as they don't plan immediate employment, they are not enthusiastic about finding jobs and job information
	Large classes; having more duties
	I was given volumes of materials, but was not given any plan to follow. I spend a great deal of time just pulling materials. I am in the process of organizing those materials for the future.
	Poor distribution of students; We should have a Vocational Education for the Handicapped program to serve some of our students; Poor teaching facilities; non-integrated classes; at present I am teaching 110 boys and about 35 girls; classes mostly boys, or all boys; negative thinking from school administrators and counselors about the needs of the program and its effectiveness if done properly.
2.	WHAT PROBLEMS ARE YOU AWARE OF THAT THE OCCUPATIONAL ORIENTATION TEACHERS HAVE IN GETTING CERTIFIED?
	The nearest certifying university is Texas A & M which offers some extension classes in the Valley. There are no significant problems here.
	The certification courses are not offered at a university close by (all certification courses).
	The present Occupational teachers will attend East Texas State University in the Summer of 1984 to take six hours towards certification. Twelve hours will be needed for complete certification.
	Have to travel to Denton or College Station. However, extension courses at TSTI help a lot.
	None, except for the thought of going back to school to receive the twelve hours required. I have completed mine now and they really are not that beneficial.
	The courses themselves are adequate, but having a limited number of places to take the courses is a burden for some people
	Very few classes are offered in the area
	Work experience
	It is quite easy to become certified; it just requires quite a bit of time and expense for the teacher to become certified and then he/she is not assured that the program will not be taken out of the system in which he/she is teaching
	The Texas Education Agency is extremely slow
	None! Furthermore, the two years of industry work experience requirements for certification is too short for Occupational Investigation and also for Marketing and Distribution. This should be raised to at least FIVE years in industry experience!!!
	The district is not making money available for occupational investigation teachers' further training; needed subjects are not offered in Laredo; schools offering needed subjects are too far from Laredo.

QUESTION NUMBER	QUESTION AND RESPONSES
	In-service could be much more effective if perhaps one certification course could be part correspondence and part intensive training on in-service days; one certification course should be more general -- a broad-based vocational certification course of some kind
	Having to teach the course one year prior to getting certified
3.	WHAT PROBLEMS ARE YOU AWARE OF IN THE ADMINISTRATION OF THE OCCUPATIONAL ORIENTATION PROGRAM?
	No significant problems
	Some years, because of student populations, it is hard to get enough students. None serious.
	None, really; both the Vocational Counselor and the Vocational Administrator are very helpful
	The problem of beginning. Once started, the administration, vocational director and teacher need more resource materials and an updated guideline for administering the program.
	None except for notification of money available
	The paper work for all vocational (sic) is a little excessive
	Occupational investigation is not offered to all eighth graders across the district - there are no occupational exploration classes in the district
	There is an excessive amount of paperwork
	I feel there is not enough time set aside for area occupational investigation teachers to meet and enrich their programs
	Not enough interest shown by the Director and Vocational Counselor; in this district the Administration does nothing to improve the Vocational Education image. It is used as a dumping ground.
	At some schools, state funding is not freely delegated to the occupational investigation teacher (i.e. new teachers are not made aware of the money); teachers without vocational guidance backgrounds are hired; the course is used as a "dumping ground" at some schools.
	It seems to me that budgeting is one of the greatest problems. There seems to be a difference of opinion in the way that students have to be counted for one school year. If I have 150 students in the Fall and then another 150 in the Spring semester, do we only say that we had a total of 150 for the year or 300 total? We need to have a clear ruling on this matter.
	We are in a small town, so it is difficult to get diverse, quality speakers
4.	PLEASE MAKE ANY RECOMMENDATIONS OR COMMENTS FOR IMPROVING THE DELIVERY OF OCCUPATIONAL ORIENTATION TO THE STUDENTS IN YOUR DISTRICT.
	More in-service time with other Occupational Investigation teachers in the area to keep up with what is new
	The main thing would be the need for another unit; make Occupational Investigation a required course
	More dissemination of information on what the course involves to administrators, counselors, and other faculty members; this information coming from the individual teacher is sometimes misconstrued as "blowing your own horn"

QUESTION NUMBER	QUESTION AND RESPONSES
	I wish it was (sic) a required course. I really do believe that students taking it will benefit from it as much or more than some of the required courses. Right now it does not determine whether a student will fail a grade or not and it is not included in figuring grade averages for honor roll, etc.
	I would think that the program would need to be extended on to the high school
	Hard to help students of all levels in one class; hard to help resource students along with higher students
	Might be better as a semester course; limit class size so more in depth guidance can take place; limit enrollment to the eighth grade
	Think this course could be more effective in a higher grade, but due to scheduling difficulties it is impossible
	More teachers should be aware of the program
	Let the course be available so that all students may take it; it is a hindrance for the teacher to have two conference periods
	Occupational investigation should be offered (at least) in every middle school in the district
	The course should be required; it should be taught in high school at the freshman or sophomore level to prepare students for other vocational courses on the junior or senior level. Junior high students will have forgotten much about careers and job interviews by the time they are ready to go to work.
	I just hope the occupational investigation program is kept in the curriculum. There has been some talk about doing away with it because of the increase in "back to basics". To me occupational investigation is and should be one of the most practical "basics" that we can have in our schools.
	More study tours
	Smaller classes
	Math activities should be included in the East Texas curriculum. Example: if studs cost $1.44 ea and 2x4 lumber is 25¢ per foot, how many studs are needed to build a 10' long wall? How many feet of 2x4 lumber are needed? What is the lumber cost? etc....
	I feel that out of the three places I've taught Occupational Investigation, this is the best method of teaching Occupational Investigation: all eighth graders, 12 weeks and basically teach the four units from the Occupational Investigation Guide.
	I have found out that using a textbook for part of my instruction helps the student recognize the importance of the subject and I wish that textbooks would be furnished for this course. I am presently using McNight's book "Succeeding in the World of Work". The material plus the work book and teacher's manual have been very effective in my teaching this year. I use it only as reenforcement to my other activities that have been suggested by East Texas.
	More money should be appropriated for field trips on bus; occupational investigation should be a required course
	Although students in the eighth grade do enjoy it and it is somewhat beneficial, occupational investigation would be more effective at the ninth or tenth grade level
	Develop a curriculum

QUESTION NUMBER	QUESTION AND RESPONSES
	Smaller classes; teacher needs to be teaching Occupational Orientation exclusively, with no other duties
	Improved Occupational Curriculum laboratory
	I think that it should be required in middle school or moved up to high school and let it be required for all in-coming freshmen or sophomores
	Definite field trip funds and procedures; plan on all vocational teachers giving a presentation of their particular program to all occupational investigation classes during the year; occupational investigation would best serve our school as a compulsory ninth grade course -- at our high school

TABLE LVIIIa

RESPONSES FROM ADMINISTRATORS ON THE "CONFIDENTIAL" EVALUATION SURVEY

QUESTION NUMBER	QUESTION AND RESPONSES
1.	WHAT PROBLEMS ARE YOU AWARE OF THAT THE OCCUPATIONAL ORIENTATION TEACHERS HAVE IN TEACHING CLASSES?
	Discipline is always a problem with eighth grade
	Poor facilities
	Fully understanding what needs to be stressed
	Students quite often do not see that there is a great deal of value in the course and therefore are not highly motivated to become seriously involved in preparation
	Lack of supplies, hard to get community involvement
	Involving the community as a resource
	In our case, State guidelines have been too vague and the fifteen job clusters are too lengthy to cover adequately
2.	WHAT PROBLEMS ARE YOU AWARE OF THAT THE OCCUPATIONAL ORIENTATION TEACHERS HAVE IN GETTING CERTIFIED?
	Courses should not be required of teachers who already have equivalent teaching/educational degrees
	No problems - but very expensive
	Universities in our area do NOT offer the needed courses, thus causing a hardship on our teacher in the summer.
3.	WHAT PROBLEMS ARE YOU AWARE OF IN THE ADMINISTRATION OF THE OCCUPATIONAL ORIENTATION PROGRAM?
	Students taking the classes who may not really be interested
	Scheduling conflicts; teacher not knowing the State guidelines
	Funding comes from various sources; it is sometimes a problem being able to mix state, local and federal funds
4.	PLEASE MAKE ANY RECOMMENDATIONS OR COMMENTS FOR IMPROVING THE DELIVERY OF OCCUPATIONAL ORIENTATION TO THE STUDENTS IN YOUR DISTRICT.
	More cooperation with counselors
	Offer it as an elective with a teacher trained in this area
	Have Occupational Orientation as a seventh grade class, followed by Occupational Investigation in the eighth grade - then general academic and regular vocational in high school
	Would be better if taught in high school
	Develop a course guide and locate a teacher who has a greater interest in teaching the course
	I feel we have a good program

TABLE LVIIIb

RESPONSES FROM VOCATIONAL ADMINISTRATORS ON THE "CONFIDENTIAL" EVALUATION SURVEY

QUESTION NUMBER	QUESTION AND RESPONSES
1.	WHAT PROBLEMS ARE YOU AWARE OF THAT THE OCCUPATIONAL ORIENTATION TEACHERS HAVE IN TEACHING CLASSES?
	Too much attention to counseling career areas and not "hands-on" information
	We have a weak teacher. In the past, it has been otherwise. The secret is the quality of the teacher.
	None yet, but electives will be too few next year to continue the program
	Need funding and more time for field trips
	Large numbers
	Class control and clear objectives
	Field trips would create more interest in the program as well as giving it an added dimension
	Having students scheduled for a full year - insufficient materials
	The orientation is conducted by two vocational counselors who seldom find the time needed
	The greatest concern is with first year instructors having done no certification work and getting them to perceive the course as the objectives dictate
	Normal teacher/student problems on field trips last period class has bus problems (shortened schedule). Extended (all day) field trips have bus problems first and last period. Impossible to have insight into all clusters.
	Scheduling of field trips
	Classes with both seventh and eighth grades enrolled
	Seventh grade students are too immature for this course and this creates a problem of student interest
	Being able to secure all of the information - need Teaching Aide. School does not provide enough funds for enough good materials.
	Securing related material and speakers, up to date materials, getting help from other agencies (TEC)
	Good or better occupational investigation in-service; better than is currently being provided through the Guidance Division of the Texas Education Agency
	Teaching materials that are relevant; scheduling effective field trip experiences
	Curriculum not adequate
	Getting enough resource people
	I feel we need more "meat" for the year-long program. Needs to be some equipment money for this program. Need to sell other teachers on program.

QUESTION NUMBER	QUESTION AND RESPONSES
	Scheduling-- classroom setting
	Classes are not as interesting as they should be; taught too much like regular academic classes. Teacher pushes too many students to college and professional areas-- little said about vocational and technical areas.
	Very few-- our teacher has had good community and student response at the middle school
	Time management
	Selection of proper materials for instruction; need to cover more information than time permits
	Would like Occupational Orientation to be taught on a higher level; it is placed in the eighth grade curriculum in our district
	Lack of understanding among parents as to program goals
	Some class loads are imbalanced; for example, one class may have fifteen students in it while another may have 34 in it. The VEH occupational investigation teacher is a former special education teacher. She relies heavily on traditional teaching methods (pencil-paper). She is being encouraged to use more hands-on learning experiences, but she seems reluctant to do so.
	Large class loads
	Not having been trained prior to teaching the class
	Difficulty in balancing class sizes
	Floating teacher
	Are not allowed to schedule enough field trips to cover the course
	Acquiring materials particularly suited and pertinent to auditorially handicapped
	The teacher has a severe heart condition and this is a concern to me; I think this condition limits the teacher as to what he can accomplish
	Wide range of academic levels; large numbers in the classes
	Our teacher apparently does not have the creative ability to motivate her students; this is an individual problem - not a statewide one
	None - she is among the best of teachers
	Once the teacher goes through training, classes go very smoothly
	None in this distr[illegible] -- Support and cooperation on all levels is excellent
	Keeping up to date on job availability and new jobs and availability of resource persons
	Lack of effective use of business and industry in the operation of Occupational Orientation; constraints on field trips and use of real life experiences due to time and transportation
	Our program does not fit the mold
	Class size (30-35); not enough planning time
	There seem to be no real problems in teaching classes. However, there is a need for at least one computer unit to present needed information to continue to be current in teaching material.

QUESTION NUMBER	QUESTION AND RESPONSES
	Not a true elective - tied to Industrial Arts. On campus Principal support could be better.
	Principals don't want them leaving the campus for field trips or any other reason
	Insufficient travel funds for students available
	No textbook; no clearly stated curriculum for each grade level
	Not enough books available at this time; however, more have been ordered and this problem should be remedied. Other teachers are not always aware of what we teach and we sometimes have negative comments because of this.
	Classes often are too large to give individual instruction. Buses not available for field trip enrichment experiences. Equipment for occupational exploration teachers is not available with Federal funds. Local budget is very limited. Subpart III money is very limited - need more for occupational exploration handicapped youngsters.
	Purchased commercial teaching materials become outdated in a hurry. Students are being bombarded with career information from other sources. Often it is hard to hold credibility in the face of gossiped information available in the homes and on the streets.
	So wide an area, they have a difficult time handling it; you can't be an expert in all of the areas
	Lack of good supplementary instructional material; it usually takes several years to become aware of all the good material available
	Funding - for field trips in particular
	None - but possibly not enough materials or experience yet
	Finding materials to use the micro-computer to teach the clusters and other facets of the program; student motivation of lower ability
2.	WHAT PROBLEMS ARE YOU AWARE OF THAT THE OCCUPATIONAL ORIENTATION TEACHERS HAVE IN GETTING CERTIFIED?
	Time and expense
	Distance involved in taking course
	Too much college work required
	Little or none
	None - too easy
	Most difficult to get instructors to attend summer school for certification
	Lack of local certification by post secondary institutions. Must either travel or depend on visiting teachers. Never sure when a class will make.
	Courses not available locally
	The location of the college offering the necessary courses
	The two year work experience plus a degree makes it somewhat difficult. Basically, we wind up looking at industrial arts majors with work experience. Sometimes hard to find.

QUESTION NUMBER	QUESTION AND RESPONSES
	No local certification - San Marcos does not try to work with teachers in setting up on-site courses in our area (Valley)
	Time and place
	Lack of uniform standards for certification
	Some universities do not offer all certification courses, yet will offer a few
	Distance - must travel
	Classes are not conveniently located for teachers to attend. Few substitutions are acceptable; and even when the Texas Education Agency director allows a stubstitution at a nearby institution, it is a hassle to get certification department to accept.
	No location close enough to this area to commute daily; necessary to live away from home in order to be certified
	Lack of decisions from the Texas Education Agency and/or as to where and when courses are offered. There is a lack of consistency on offering the complete program at the same location.
	Too many classes to take on some occasions
	None - all teachers have received certification within the last two years
	Our teacher found it very expensive to get certified
	Need to get courses closer to home base so that they won't have to go off to school in the summer
	Need more teaching aids
	None - classes are brought to our area and schedules are made that help our students enroll
	No problem other than time to complete certification
	Speed of transcript review
	She must travel great distances and stay away from home because the Teacher Training Center at Corpus Christi State University does not offer all required courses
3.	WHAT PROBLEMS ARE YOU AWARE OF IN THE ADMINISTRATION OF THE OCCUPATIONAL ORIENTATION PROGRAM?
	Making sure teacher relates information to students - practical as well as career information
	The new HB 246 may give us problems with enrollment
	Generally at a middle school and separated from existing vocational programs which results in entering another principal's "private territory"
	Lack of understanding of the purpose of the course by the present principal of the school
	Two vocational counselors for three high school campuses
	The greatest concern is with first year instructors having done no certification work and getting them to perceive the course as the objectives dictate

QUESTION NUMBER	QUESTION AND RESPONSES
	Limit class periods; teacher cannot teach as many periods as other teachers, thus scheduling problems exist
	Follow-up procedure
	It is sometimes a challenge to operate the program under vocational guidelines. The curriculum is academic and thus, falls under academic supervision.
	Students are not being vocationally guided into one of the occupational investigation programs. Staff development which meets the needs of two occupational investigation teachers.
	Keeping teachers
	State: Do the best they can with the large scope of material/curriculum to be covered. Local: Difficult to convince principals (academic) of importance of Occupational Orientation and its place in education.
	Principals not informed enough about the Program. Should require all school administrators for certification on principal and superintendent level to take some vocational classes.
	Since previous Director has been relieved from this responsibility in Austin no one else seems to know what is happening.
	No major problems
	Principals not sold on the Program
	The nature of our school system
	Lack of certified personnel in Occupational Orientation; lack of funds designated for guidance operation
	Providing enough equipment materials that are up to date and supplies; getting enough money budgeted for the Program
	Getting consistency from school to school
	Protecting enough planning periods for the Occupational Investigation teacher
	The Texas Education Agency standard of 140 average pupil membership in Exploration for a two-teacher program is very difficult to attain in a high school with a ninth grade enrollment of about 425 students
	Campus principals using as dumping ground
	Head administration and principals fail to see the real value of the Program. They say they believe in it, but force students to take other subjects and there is not enough time to schedule Occupational Investigation. (Occupational Investigation was a required course for five years in our school but it has now been changed and watered down.)
	We only have one program. Should have one on every middle school campus. Eighth grade level required for all students.
	Superintendent not understanding their value
	Some principals want the vocational administrator to get the program for their school and once they have the program they (principal) want to run and do with the program as they see fit.
	Would like clearer curriculum guidelines and updated materials

QUESTION NUMBER	QUESTION AND RESPONSES
	Opening it up as a free elective. Consideration should be given toward requiring it of all students at the seventh and eighth grade level or optional at the ninth.
	None - money is available for obtaining new materials and help is provided when needed
	We have a two-hour lab (Occupational Exploration - Personal Services) designed for only handicapped students (VEH). We cannot use any of Subpart II set aside funds for handicapped in the program. It is a very costly program to operate. We receive very limited Subpart III funds to distribute over our two occupational investigation teachers, vocational counselor, and the occupational exploration teacher.
	They are not vocationally orientated
	We have very few problems in the administration of Occupational Orientation
	In Occupation Exploration the Principal and at times the teacher try to make a "shop" class of the program
	Offered as a one-semester elective in junior high in our district and competition between Occupational Orientation and other electives (Home Economics, Speech, Art, Band, Foreign Language, Exploratory Industrial Arts) creates enrollment problems (low). Some of these electives may be taken either as full year or semester courses.
	Not enough money
	In my case, the lack of knowledge as to where they should be going and resources available to the teacher
	It is hard to get school administrators to realize how valuable the course is, but adding the computer has helped this tremendously
	Insufficient budget (we need the State $400)
	House Bill 246
	Middle School administrator feels that the program does not belong in their school; they feel that academics should be stressed
	Finances
4.	PLEASE MAKE ANY RECOMMENDATIONS OR COMMENTS FOR IMPROVING THE DELIVERY OF OCCUPATIONAL ORIENTATION TO THE STUDENTS IN YOUR DISTRICT.
	None - all good
	I would like to see the course mandatory at the eighth grade level
	State should place Occupational Investigation in the eighth grade level - not in seventh or eighth. Seventh grade students are not mature enough for Occupational Investigation.
	With H.B. 246, we will need curriculum materials that compress 15 clusters and jobs therein, while at the same time creating job investigative inquiries and motivating students to achieve academic successes in preparation for future jobs. Occupational Orientation in-services should teach instructors how to be positive motivators.
	Needs to be reduced to one semester maximum and all students should be required to enroll in at least Career Investigation
	The Program needs to have a school bus made available for field trips. Once or twice a month would be ideal. At present, no money is available for funding field trips.

QUESTION NUMBER	QUESTION AND RESPONSES
	The teachers should make the program as interesting as they can-- different from a regular (sic) like say English. Also--get off this "everybody" should go to college!
	Foreign Language, Home Economics, Speech, Art should be offered only as semester exploratory electives at the seventh and eighth grade levels
	We will phase it out at grades seven and eight and offer the courses at a higher grade if we keep it at all, because of the scarcity of elective time available at this level
	More funds for Occupational Exploration - Vocational Education for the Handicapped lab students; buses for field trips; more resource persons brought in to classes; smaller numbers in classes; room in the schedule to keep it at junior high after House Bill 246 is adopted
	There are a number of software packages that are available in this field that could be successfully used if a computer terminal was available for our use
	Objectives for grade levels; introduction of computer technology through hands-on training
	Our Program is effective
	Move to high school and place under direct control of the vocational administrator
	Keep it at the eighth grade level; keep it a semester course; let the teachers teach five periods in a six period day or six periods in a seven period day
	H.B. 246 will probably eliminate Occupational Orientation
	Need teacher to become more involved with basic Program. Too much technical theory and no practical application.
	Eighth grade students are currently being assisted by the Middle School counselor in preparing their four year high school plan. This year this will be done with seventh grade students rather than eighth. We believe this will give the eighth grade students a much better opportunity to look at the things they can benefit from being in Occupational Investigation.
	Required subject with a restricted curriculum, with additional reading and a substitute credit of English
	Subject matter for clusters must be developed deeper than the notebook indicates. Teacher spends a great deal of time developing the concepts. Perhaps being a first year teacher is the reason. I wish we had better and more complete resource materials.
	Develop an up-to-date curriculum
	Make Occupational Orientation bonus units and advocate that all students take the course
	Reallocation standard of 50 students per teacher (average pupil membership) would be a more realistic standard
	A very good course
	I think our delivery is good. We need to be in position in order that each eighth grader will be exposed to the course.
	Seventh grade students are too immature for this course. This creates a problem of student interest.
	Being able to offer the course in all middle schools

QUESTION NUMBER	QUESTION AND RESPONSES
	Presentations to Elementary classes with additional information on Junior High vocational program offerings
	Need more classrooms so program can be expanded; facilities have always been a problem
	Improved classroom facilities
	Maybe add another unit in the near future
	We feel that the delivery system here is adequate and that the ninth grade is the most appropriate place for the course to be taught
	Excellent program for junior high!
	A statewide newsletter for occupational investigation teachers might be helpful; it might focus on successful and innovative teaching ideas for occupational orientation (these teachers often tend to feel isolated because there are so few of them within a school district)
	Perhaps more access to computers would be beneficial; the world of the future will likely be dominated by this technology, and it would be helpful if students studied the future in this format
	Be a required course on a higher level
	Allow teachers in grades below nine to teach the same class load as other teachers
	Time management
	Our teacher has plenty of money budgeted, but we can't get him to spend it. We practically have to make his purchases for him. He finds it very difficult to prepare a requisition.
	I believe a good Industrial Arts major would do a fine job teaching Exploration without taking the certification courses
	Increase resource library materials
	When curriculum is updated, show how to incorporate the computer
	Adding to what we have, expansion
	Additional funding for field experiences
	The topic should be included in the Vocational Administrators workshop
	I would like to see only eighth grade students go into the program of occupational investigation. Seventh graders are not mature enough to handle the way the program is structured.
	We need to receive additional information on classes offered in Harlingen, where our students continue high school vocational training. We also need to provide proper training stations for students. This requires financial expenditures by the district.
	Less competition with other electives; Occupational Orientation should be taught as a required subject
	Good State in-service workshops

QUESTION NUMBER	QUESTION AND RESPONSES
	This course should be a required course for all students at the junior high level
	Select a more creative teacher (our responsibility)
	Group students by academic levels; establish a number to limit maximums in each class; continue to develop instructional materials
	Make it required

Throughout the questions, many individuals recommended that occupational investigation be required for all students, in many cases at the eighth-grade level. However, others advocated it should be placed at the high school level under the "control" of a vocational administrator. There were many recommendations that seventh- and eighth-grade students should not be placed in the same classes. Also, several individuals indicated that seventh graders (some also mentioned eighth graders) are too immature to benefit from the class.

Some of the respondents alluded to various problems caused by a vocational class offering being placed in an academic setting--and being taught as an academic class. Several times, difficulties with principals or other administrators not fully understanding or supporting the program were described. This same comment was made of other groups--academic teachers, counselors, vocational counselors, vocational directors and even parents and community members.

Some small school districts appeared to have difficulties locating resource speakers and field trip experiences. Their programs also seemed to fluctuate in quality depending on the qualifications of the teachers employed. "New" teachers working for a full year before taking any certification courses was reported as being less than desirable. A few administrators reported their teachers were not performing at a professional level and the local programs were suffering. References were made to the fact that individual programs were only as good as the competencies demonstrated by the teacher.

There were several comments made in regard to field trips. Field trips appare to be a desirous method of instruction, but various respondents identified problems and needs associated with field trips. Most of the constraints were due to time, transportation and budgeting. Also, building principals were identified as not supporting field trips.

External Problems

External problems, those requiring solutions from outside the local education agencies, were identified in all four questions, although Question Two specifically addressed teacher certification. This, curriculum development, teacher inservice, and state "guidelines" were the most commonly referred areas of weakness.

Many difficulties with the present curriculum or more correctly, instructional activities, were identified. The most often mentioned area of concern was with the instructional area of the fifteen clusters. Respondents commented that there were not enough activities, activities were too elementary, and that the clusters contained too much subject matter to cover in a semester.

The need for "up-dated" materials was mentioned several times, as was the need for a textbook. The lack of specific curriculum guidelines was addressed and a lack of vocational approach to instruction was criticized. A need for instructional objectives for each grade level was addressed. A few mentioned the need for computer-aided instruction.

State and regional inservice was criticized--the quality of the first and the lack of the second. Administrators expressed difficulties getting their faculty members to attend the state inservice. One vocational administrator suggested that Occupational Orientation be covered at their inservice to alleviate lack of understanding about the program.

As found in Part II, the biggest problem in teacher certification was the inconvenient locations of certifying institutions. Along with this was the expense factor for some of the teachers, especially as one teacher put it, when the continuation of the program at the local level was in question. The transcript review process was described as being slow and inconsistent.

There appeared to be questions regarding how many classes the teachers needed to teach. Some respondents felt the teachers needed multiple planning periods, others questioned it. Reallocation standards were addressed, as being too high, especially for small school districts. Budgeting was also mentioned several times--especially when handicapped students were involved. Lack of funds and lack of knowledge about available funds was listed several times.

It should be noted that the previous discussion of the comments made by professionals in response to questions one through four covered problems, difficulties and weaknesses. There were positive comments and responses such as "none" or "we have very few problems," etc. Also, many times there were no written responses, which could be interpreted as lack of any negative factors.

Data Analysis for Student Evaluation
Profile of Respondents

Five members of the Project Advisory Committee were able to participate in the testing of Occupational Orientation students to determine the effect of the program on their career maturity. Each teacher was asked to assign students to two groups in order to carry out the research design.

Because the pretests and posttests would be administered in four of the schools during a single semester, a pretest/posttest-posttest only design was used to determine if testing bias was present due to the short interval between tests. The fifth school also used the same procedure although, as a thirty-six week program, there were approximately thirty weeks separating the tests.

Due to the two-and-one-half hours necessary to administer the tests, the teachers were advised to administer one section of the test each day for six days. Teachers were also asked to use their discretion to determine if the test should be read aloud to the students.

Teachers were furnished with the test booklets and answer sheets. Upon completion, the answer sheets were mailed to the Project office. Tests were hand-scored and raw scores were transferred to computer coding sheets for key punching at the North Texas State University Computer Center. Using subprograms provided in the Statistical Package for Social Sciences, ($SPSS^x$) two types of t-tests were used. Raw scores were translated to percentile rankings in order to average and compare the scores for students in different grades. To test for significant differences between the pretest and posttest scores of the students a t-test for matched or related samples was used. (It should be noted that although a one-tailed t-test was the most appropriate test, $SPSS^x$ by default, automatically computes a two-tailed test.) "By default, the probability is based on the two-tailed test. This is appropriate when significant differences in either direction are of interest. When theoretical considerations predict that the difference will be in a given direction (such as the Group 1 mean will be higher than the Group 2 mean), a one-tailed test is appropriate. To calculate the one-tailed probability, divide the two-tailed probability by 2" (4, p. 435).

Description of Participating Schools

School A.--This middle school is located near Dallas and is made up of a racially-mixed student population of approximately 600 students. The occupational investigation unit was the only one that was thirty-six weeks in length.

The program was six years old at the time of the study and had been taught by the same teacher. The class was an elective offered to both seventh and eighth graders. A total of sixty-eight students were tested. Valid tests from twenty-four students were used for the pretest and posttest which were administered with a thirty-week interval.

School B.--The occupational investigation class tested in this junior high has been in existence for eleven years and taught by the same teacher. It was a one-semester course required of all eighth graders in the school. The school is located in a small city in the central part of Texas.

There were eighteen weeks between the pretest and posttest with a total of seventy-two students participating. A total of sixty pretests and posttests were usable for data analysis on five of the subtests and fifty-six for the sixth. Only four students were posttested without taking the pretest.

School C.--This occupational investigation class was offered at the high school level as an elective. All students in grades nine through twelve, regardless of achievement level could elect to take the class. The occupational investigation class has been offered for five years.

There were sixteen weeks between the pretest and the posttest. The number of students participating totaled 115. Seventeen were used in the posttest only group. Totals varied for usable data on the subtests--fifty-six for the Attitude Test, fifty-three for the first competency test and fifty-one for the other four competency tests. The data gathered for this school were not included in the total group analysis.

School D.--This was the only occupational exploration unit tested. It was offered as a one semester, computer literacy course at the high school level in Fort Worth. Students in grades nine through twelve were eligible to enroll and no prerequisites were required. The same teacher has taught the course for the two years it has been offered.

There were fifteen weeks between the pretest and posttest. One hundred and four students were tested and for the posttest only group, fifty students were tested. With the exception of the Attitude Test, fifty-two pretest/posttest participants provided valid data for the CMI subscales. Fifty-one participants were used for the Attitude Test.

TABLE LIX

NUMBER OF PRETEST/POSTTEST AND POSTTEST ONLY PARTICIPANTS BY INDIVIDUAL SCHOOL

Schools	Attitude		Comp 1		Comp 2		Comp 3		Comp 4		Comp 5	
	Pre/Post	Post	Pre/Post	Post	Pre/Post	Post	Pre/Post	Post	Pre/Post	Post	Pre/Post	Post
A	24	35	24	35	24	35	24	35	24	35	24	35
B	60	4	60	5	60	5	60	4	60	4	59	4
C	[illegible]	17	53	17	51	17	51	17	51	17	51	16
D	51	[illegible]	52	51	52	51	52	51	52	50	52	50
E	90	24	89	24	88	24	86	24	85	24	82	23
Totals	281	130	278	132	275	132	273	131	272	130	268	128

School E.--This occupational investigation unit was a one-semester course offered to seventh and eighth graders at the junior high level. The student population was made up of mostly racial minorities with few Anglo students. One section of students included in the testing was a talented and gifted (TAG) group. The others represented all achievement levels. The school is located in a consolidated school district, south of Dallas.

The pretests and posttests were administered to a total of 125 students with a sixteen-week interval. Twenty-four of these students were posttested only. Usable data varied from ninety tests to eighty-two tests on the subscales.

Table LX contains the data used to determine if testing bias was present. When the posttest scores from all schools were combined their lack of a significant difference in the variance of the two groups supports the observation that testing bias was not present.

TABLE LX

RESULTS OF A t-TEST FOR INDEPENDENT SAMPLES TO DETERMINE POSSIBLE TESTING BIAS

CMI Test	N	Mean	Standard Deviation	f	P
Attitude					
Pre/Posttest	314	49.4204	10.469	1.19	0.262
Posttest Only	130	50.7769	9.610		
Self Knowledge					
Pre/Posttest	307	46.8469	11.190	1.32	0.067
Posttest Only	132				

BEST COPY AVAILABLE

TABLE LX--Continued

CMI Test	N	Mean	Standard Deviation	f	P
Knowing Jobs					
Pre/Posttest	303	45.5314	11.522	1.21	0.217
Posttest Only	132	49.0909	10.488		
Choosing A Job					
Pre/Posttest	301	46.8173	11.454	1.26	0.136
Posttest Only	131	49.0687	10.219		
Looking Ahead					
Pre/Posttest	299	45.9732	10.451	1.17	0.310
Posttest Only	130	47.5769	9.666		
Planning Ahead					
Pre/Posttest	295	46.6915	9.871	1.02	0.902
Posttest Only	128	48.8047	9.948		

The combined groups' mean percentile scores for Schools A, B, D, and E are contained in Table LXI. The data gathered from School C showed a rather substantial decrease in scores and, therefore affected the means of the total group adversely. In five of the subscales, the posttest only group scored higher when the group percentile means were compared. This could be attributed to one, or a combination of factors, including the unequal pre/post and posttest only divisions within individual schools or lack of random assignment to groups. Another factor could have been that students get "bored" with the test--especially after two applications. Therefore, they might not have achieved as high on the second test. This idea must be taken into consideration when examining the differences between the pretest and posttest scores for the entire group and for the individual schools. It was this factor that lead to the exclusion of School C from the group scores.

The t-test for the entire group was run with the percentile scores from students in all the schools. The data showed no significant differences, and two subtests showed a decrease in scores. With exclusion of the data from School C, four positive significant increases in average percentile scores were present.

As presented in Table LX, the combined percentiles showed a significant improvement for the Attitude Test, Choosing A Job, Looking Ahead, and Planning Ahead. The subject matter in these four tests are compared to the Occupational Orientation instructional areas of "Self Awareness," "Socioeconomic Factors," and "Educational Planning and Decision Making."

There was a slight decrease (-.25) in the group's posttest percentile score for the subscale Knowing Yourself. There was a slight increase in the posttest percentile score for Knowing about Jobs (+.04) but it was not significant.

TABLE LXI

RESULTS OF THE t-TEST FOR COMPONENT TESTS OF THE CAREER MATURITY INVENTORY FOR SCHOOLS A, B, C AND E

CMI Test	N	Mean	Standard Deviation	t	P/2
Attitude					
Pre	225	49.0489	8.217	3.00	.002**
Post		50.5778	10.142		
Self Knowledge					
Pre	225	49.6222	9.181	- .37	.358
Post		49.3733	10.168		
Knowing About Jobs					
Pre	224	48.6473	9.270	0.24	.404
Post		48.7768	10.278		
Choosing A Job					
Pre	222	48.4099	9.446	3.23	.000**
Post		50.3108	10.032		
Looking Ahead					
Pre	221	47.2896	8.969	2.88	.002**
Post		49.0633	9.359		
Planning Ahead					
Pre	217	47.9816	8.609	2.10	.019*
Post		49.3088	9.100		

*P < .05. **P < .01.

Two of the five schools had significant positive differences between the pretest and posttest percentile scores. One school had lower posttest scores than originally scored on the pretest scores.

TABLE LXII

PRE/POSTTEST AVERAGE MEAN DIFFERENCES IN PERCENTILE SCORES FOR INDIVIDUAL SCHOOLS

CMI Test	Total	School A	School B	School C	School D	School E
Attitude						
Pretest	49.0489	48.2917	49.8167	49.6429	53.0392	46.4778
Posttest	50.5778	47.2667	54.2667	48.8750	53.5490	47.2667
Mean Difference	+ 1.5289*	- 0.8333	+ 4.4500*	- 0.7679	+ 0.5098	+ 0.7889
Self Knowledge						
Pretest	49.6222	44.0417	53.5667	48.5849	53.4615	46.2247
Posttest	49.3733	50.1250	52.2833	40.5283	53.6923	44.6854
Mean Difference	- 0.2489	+ 6.0833*	- 1.2833	- 8.0566	+ 0.2308	- 1.5393
Knowledge About Jobs						
Pretest	48.6473	47.8750	52.7167	48.6471	52.9423	43.5455
Posttest	48.7768	47.9167	51.9833	36.3529	53.6538	43.9432
Mean Difference	+ 0.1295	+ 0.0417	- 0.7333	-12.2941	+ 0.7115	+ 0.3977
Choosing Jobs						
Pretest	48.4099	45.7500	51.0667	44.9804	53.5962	44.1628
Posttest	50.3108	52.9167	53.3667	37.5490	53.3269	45.6279
Mean Difference	+ 1.9009*	+ 7.1667*	+ 2.3000*	- 7.2157	- 0.2692	+ 1.4651

BEST COPY AVAILABLE

TABLE LXII--Continued

Looking Ahead						
Pretest	47.2896	44.5833	49.6333	42.9412	51.6538	43.7294
Posttest	49.0633	50.4583	52.0500	37.5490	51.9423	44.8000
Mean Difference	+ 1.7738*	+ 5.8750*	+ 2.4167	- 5.3922	+ 0.2885	+ 1.0706
Planning Ahead						
Pretest	47.9816	46.0833	49.6943	42.6863	52.1923	44.6341
Posttest	49.3088	51.1667	49.8983	40.1176	52.6154	46.2439
Mean Difference	+ 1.3272*	+ 5.0833	+ 0.2034	- 2.5686	+ 0.4231	+ 1.6098

*Significant increase between pretest and posttest scores.

It is interesting to note the actual mean percentile scores of the pretests and posttests. The highest pretest and posttest scores (although there were no significant gains) were scored by the students in the occupational exploration computer literacy course. The next highest were those of the occupational investigation class which was an elective. When the pretest scores of schools offering occupational investigation as an elective are reviewed they all fall under the fiftieth percentile. Many of the individual scores were extremely low with a high percentage falling in the lowest quartile. (Time and space prohibited the analysis of individual scores.)

From these data, it can be observed that many students electing to take occupational investigation have low career maturity scores to begin with. This has a big effect on research using posttest only designs to compare occupational investigation students to other students.

School A.--School A was the only school offering occupational investigation as a full year course of study. Of the six subscales tested, four displayed a significant positive difference in the mean percentile ranks from pretest to posttest. After thirty weeks of instruction there were significant gains on the following CMI tests: Knowing Yourself (+6.08), Choosing A Job (+7.12), Looking Ahead (+5.88), and What Should They Do? (+5.08). There was a .83 decrease in the mean scores for the Attitude Test and a modest .04 increase in the Knowing About Jobs. (It should be noted that students had received about four weeks of [illegible]ction before the pretest was administered. The instruction was in the area [illegible]elf Appraisal.")

This school showed the most significant gains in scores. Although quality of teacher performance, instructional strategies, etc. may have played a part, the longer period of instructional time must be taken into consideration.

TABLE LXIII

RESULTS OF THE *t*-TEST FOR COMPONENT TESTS OF THE *CAREER MATURITY INVENTORY* FOR SCHOOL A

CMI Test	N	Standard Deviation	*t*	*P*/2
Attitude				
Pre Post	24	7.737 8.346	-0.56	.290
Self Knowledge				
Pre Post	24	7.893 7.[illegible]98	3.34	.002**
Knowing About Jobs				
Pre Post	24	8.077 8.324	0.03	.490
Choosing A Job				
Pre Post	24	9.256 8.340	5.54	.000**
Looking Ahead				
Pre Post	24	8.742 8.846	2.90	.004**
Planning Ahead				
Pre Post	24	7.312 11.499	1.94	.033*

*P < .05. **P < .01.

School B.--The only other school to display significant gains was School B. After eighteen weeks of instruction the occupational investigation students showed significant percentile gains for the *Attitude Test* (+4.45), *Choosing A Job* (+2.30), and *Looking Ahead* (+2.41). Although the increases were significant, they were not as great as those scored by students in the full-year course.

The students scored a lower mean percentile score for *Knowing Yourself* (-1.28) and *Knowing About Jobs* (-0.73). *What Should They Do?* showed a slight increase of 0.20 which was not significant.

School C.--School C presented an interesting problem. As discussed previously, a two-tailed test was used. Because of this, School C displayed five significant differences as shown in Table LXIV on the six tests. However, these differences were *negative*. When the posttest scores from this school were submitted, the teacher expressed his reservations about the validity of the results. Many of the students were graduating seniors and applying themselves to such a lengthy test was not necessarily on their agenda for the second semester.

TABLE LXIV

RESULTS OF THE *t*-TEST FOR COMPONENT TESTS OF THE *CAREER MATURITY INVENTORY* FOR SCHOOL B

CMI Test	N	Standard Deviation	*t*	*P*/2
Attitude				
Pre	60	7.668	4.49	.000**
Post				
Self Knowledge				
Pre	60	9.933	-0.93	.179
Post				
Knowing About Jobs				
Pre	60	7.742	-0.62	.270
Post		10.774		
Choosing A Job				
Pre	60	7.015	2.37	.011*
Post		9.644		
Looking Ahead				
Pre	60	7.669	2.18	.017*
Post		8.351		
Planning Ahead				
Pre	60	7.669	2.18	0.17*
Post		8.351		

*P < .05. **P < .01.

TABLE LXV

RESULTS OF THE *t*-TEST FOR COMPONENT TESTS OF THE *CAREER MATURITY INVENTORY* FOR SCHOOL C

CMI Test	N	Standard Deviation	*t*	*P*/2
Attitude				
Pre	56	9.122	- .66	0.257
Post		10.327		
Self Knowledge				
Pre	53	7.412	- .563	.000**
Post		11.284		
Knowing About Jobs				
Pre	51	10.413	-7.84	0.000**
Post		10.032		
Choosing A Job				
Pre	51	10.624	-4.95	.000**
Post		10.122		
Looking Ahead				
Pre	51	10.019	-3.66	.000**
Post		8.090		
Planning Ahead				
Pre	51	9.821	-1.90	.032
Post		8.385		

*P > .05. **P > .01.

Because the test scores transcend theoretical constructs--they, if taken literally would demonstrate a decrease in maturity--the test scores for School C were not included in the total group scores. It was after the deletion of School C scores that the total group scores displayed significant gains.

School D.--The percentile scores for School D represented the highest of all the schools on the pretests. Students' scores were all above the fiftieth percentile. On all the posttests with the exception of Choosing A Job (-0.27) students scored very slight gains ranging from .23 to .71. It was expected that occupational exploration students would not increase their scores as much as the occupational investigation students.

TABLE LXVI

RESULTS OF THE *t*-TEST FOR COMPONENT TESTS OF THE *CAREER MATURITY INVENTORY* FOR SCHOOL D

CMI Test	N	Standard Deviation	*t*	*P*/2
Attitude				
Pre	51	9.128	.47	.320
Post		11.537		
Self Knowledge				
Pre	52	9.515	.16	.436
Post		11.168		
Knowing About Jobs				
Pre	52	9.317	.62	.268
Post		9.699		
Choosing A Job				
Pre	52	9.920	-.21	.419
Post		11.739		
Looking Ahead				
Pre	52	8.769	.23	.409
Post		9.761		
Planning Ahead				
Pre	52	9.756	.44	.330
Post		8.428		

The Occupational Orientation program at this school is an occupational exploration unit for computer literacy. Although the interim between tests was fifteen weeks, approximately thirteen weeks were spent on computer education. Therefore, it was not assumed that the occupational exploration training would have much effect on the students' career maturity.

School E.--The average pretest percentile ranking for the students in School E were in the lowest of the five schools tested. Many of the students tested had low reading levels and the test was administered orally. The validity of this practice is not known.

TABLE LXVII

RESULTS OF THE *t*-TEST FOR COMPONENT TESTS OF THE *CAREER MATURITY INVENTORY* FOR SCHOOL E

CMI Test	N	Standard Deviation	*t*	*P*/2
Attitude				
Pre	90	4.232	1.03	.153
Post		8.529		
Self Knowledge				
Pre	89	8.463	-1.50	.068
Post		9.013		
Knowing About Jobs				
Pre	88	7.907	0.55	.293
Post		8.569		
Choosing A Job				
Pre	86	8.598	1.47	.074
Post		7.840		
Looking Ahead				
Pre	85	8.434	1.07	.143
Post		8.407		
Planning Ahead				
Pre	82	8.025	1.59	.058
Post		7.613		

Although none of the gains were significant, students did increase their posttest scores over the pretest scores for five of the six tests. The exception was *Knowing Yourself* (-1.54). For three of the tests, *Choosing A Job*, *Looking Ahead*, and *What Should They Do?* the average percentile score increased over one percentile.

Summary

Both a quantitative and a qualitative evaluation were completed to measure Occupational Orientation programs at the local level. To obtain nominal data that described each unit of Occupational Orientation funded during the 1983-1984 school year, two questionnaires were sent and returned from 149 local education agencies in Texas.

To obtain qualitative data a "confidential" survey was also sent to the districts to solicit candid input regarding the management of Occupational Orientation programs at both the state and local level. Also, based on recommendations from the Project Advisory Committee, the Career Maturity Inventory was administered to measure the effects of Occupational Orientation. The test was used to determine the effects, if any, of Occupational Orientation classes on the career maturity of students. Students in five different types of programs were tested.

Quantitative Data

During the 1983-1984 school year, 149 local education agencies received vocational education funds to support 273 units of occupational investigation and 58.5 units of occupational exploration. In those units, 17.7 percent (50) of the occupational investigation teachers were teaching the class for the first time. Thirty-six percent (22) of the occupational exploration teachers were new to the course.

To identify the variations in the instructional organization of Occupational Orientation classes, several questions were asked. There was a great deal of diversity, not only from district to district, but within districts as well. It was determined that occupational investigation classes ranged from 45 to 60 minutes in length with nearly half of the districts reporting a class length of 55 minutes. There was a bigger range in the times reported for occupational exploration units--from 45 to 180 minutes in length. Fifty-three percent of the units were 55 minutes in length. Also, the length of the classes in weeks displayed diversity. It was reported that occupational investigation classes were taught from six to thirty-six weeks with an eighteen week length being most common. Occupational exploration ranged from nine to thirty-six weeks in length with thirty-six weeks being reported most often.

School districts fund both occupational investigation and occupational exploration differently. It appeared that some districts depended more on the four hundred dollars of instructional funds than others as demonstrated by the range of funds reported. Local districts reported budgeting funds from a low of $50.00 per unit to a high of $5,000 per unit for occupational investigation. The mean was $996.71 per unit. Twenty-three and a half units reported $1,000 per unit being budgeted for occupational exploration. This figure represented the mode.

Although reallocation requirements require a minimum amount of students per unit, there was a wide range of students reported per class. The average number of students per occupational investigation class ranged from 5 to 175 and for occupational exploration from 10 to 75. Local professionals reported that from 16 to 6,500 students would complete occupational investigation at the end of the 1983-1984 school year in their districts and 18 to 2,000 students would complete occupational exploration.

It was very difficult to communicate with local school personnel in regard to their programs. Occupational investigation was designated by ten different titles at the local level. Occupational exploration had separate titles due to the nineteen different career areas covered by the units. Some of these areas were the same, but differed in scope.

Although specific numbers were not required, local districts were asked to rank order the special populations their programs served. It was determined that both courses of study served approximately the same special populations when compared by rank order. Disadvantaged appeared to be the largest special population served and handicapped was the smallest. There were three V.E.H. units of occupational investigation and five for occupational exploration.

Curriculum and instructional materials have been developed on the assumption that students taking Occupational Orientation classes are "beginning" students with little or no previous knowledge of the subject matter. But some school districts are allowing students to repeat the classes. Only one school district reported that students who had successfully completed occupational exploration could repeat the course. However, 24 of the 148 school districts responding to the question allowed students to repeat occupational investigation in some or all of their units. This figure represents 16.2 percent of the school districts and represents a large number of students.

Because of the diverse structuring of local programs of Occupational Orientation, districts were asked to state their perceived purpose of occupational investigation and occupational exploration. There was more standardization in the perceived purpose of the courses than in the structuring of classes. Career awareness was the most often reported purpose for occupational investigation with considerable mention given to planning for career choice, high school scheduling and career decision making. Occupational exploration was reported to offer students opportunities for "hands-on" laboratory skills to determine career interests and to explore vocational training options available to them in high school.

Qualitative Data

The confidential survey and Career Maturity Inventory were used to obtain data to evaluate Occupational Orientation. A total of 135 surveys were returned by 14 administrators, 32 teachers and counselors, and 89 vocational administrators. All three groups felt their Occupational Orientation programs were "strong" and effective in meeting the occupational information needs of all types of students. However, administrators did not feel that Occupational Orientation was being used to increase non-traditional enrollment in vocational education classes; teachers and counselors did to a greater extent.

There was a negative response to the question regarding high school counselors' involvement in the Occupational Orientation program. Also, vocational administrators to the greatest degree and the other two groups to a lesser degree reported that Occupational Orientation may not be understood by academic teachers. All three groups, especially teachers, reported that Occupational Orientation teachers were trained very well.

A review of the open-ended comments included on the questionnaire revealed recommendations for occupational investigation to be required for all students. However, several comments questioned the merit of offering occupational investigation to seventh graders. Mixing grade levels was reported as not being desirable at the junior high level. Also, there were problems reported caused by the occupational investigation classes being placed under the control of building principals and not vocational administrators.

Public relation within and outside the schools was described as a weak area. Nearly every group (with exception of the students) was reported as "not understanding" Occupational Orientation. Counselors, vocational directors, principals, academic teachers, parents and community members were identified as not understanding Occupational Orientation.

Items relating to budgeting were singled out several times as were several aspects relating to field trips. Field trips were perceived as being a valuable instructional tool, but teachers were encountering many difficulties trying to organize the trips.

In the area of curriculum development, many specific items were mentioned as were general comments such as the need for up-dated materials. The lack of specific curriculum guidelines and objectives for different grade levels were listed. There appeared to be a need for additional curriculum development in the instructional area of the fifteen clusters.

As found in Part II, the biggest problem in teacher certification was the inconvenient locations of teacher certification institutions. This, plus the expense of receiving certification was pointed out several times. There were also concerns about the quality and quantity of teacher inservice.

To gather qualitative data on students, those enrolled in five different types of Occupational Orientation programs were given the *Career Maturity Inventory* to determine their effect on the career maturity of students enrolled. Six areas were tested by use of subtests including: *Attitude Test*, *Knowing Yourself*, *Knowing About Jobs*, *Choosing A Job*, *Looking Ahead*, and *What Should They Do?*

Of the five individual schools, two showed significant increases. Seventh- and eighth-grade students enrolled in a year-long occupational investigation course showed significant increases on four of the subtests. Eighth-grade students enrolled in a required occupational investigation class scored significantly higher on three of the subtests. Students in one-semester elective occupational investigation classes in the eighth grade and high school did not show significant gains. Students in the occupational exploration class also did not show significant gains.

When the pretest and posttest scores of the entire group were compared significant increases were found on four subtests: *Attitude Test*, *Choosing A Job*, *Looking Ahead*, and *Planning Ahead*. There was close to a two-point increase in the percentile scores of students on *Choosing A Job*.

Recommendations

Based on the input received from each school district receiving state funds to support a partial, full or multi unit Occupational Orientation program several areas needing improvement were identified. Many of the problems described can be solved by improving communications within the school districts with help from other agencies. The following recommendations are made as possible solutions to difficulties being experienced by local education agencies when managing their Occupational Orientation programs.

1. School districts need more on-site technical assistance. Most problems identified were endemic and not statewide or widespread. Therefore, individual help is needed in many cases. New units especially need help in getting started. Also, first year teachers need help. Many of them teach for a full year without the benefit of certification classes or inservice.

2. Inservice activities need to be increased and improved. Teacher educators need to become more involved in local school district inservice for

Occupational Orientation teachers. Also, inservice activities for vocational and other administrators need to be offered to help them better manage Occupational Orientation programs.

3. A public relations/communications handbook needs to be developed for Occupational Orientation teachers. Nearly every professional group inside districts and the public was identified as not understanding the program and surprisingly, counselors do not appear to be involved as much as they should be in Occupational Orientation programs.

4. Alternatives to the traditional field trip must be developed. Many districts do not have enough resources (personnel, vehicles, budget) or administrative support to take students on field trips.

5. Both occupational investigation and occupational exploration are not designed for students to repeat the class, but currently 16 percent of the districts are allowing students to repeat the classes, many times with students taking the class for the first time. Either this should be discouraged or additional instructional materials and curriculum needs to be developed to meet the needs of "second year" students.

Additional input was received for teacher certification and curriculum development. Many comments supported recommendations made in Parts II and III. Additional recommendations are as follows:

1. Over eighty references were made to the perceived purpose of occupational investigation being related to educational planning. Eleven comments specifically mentioned orientating students to vocational education offerings and forty-nine related to planning for high school. This purpose for occupational investigation appears to be a new thrust to the program. Descriptions of occupational investigation should reflect this guidance function of the course.

2. The goals established by the Texas Education Agency appear to be clear to most of the personnel in the local education agencies, but instructional objectives are not. House Bill 246 and the new curriculum being developed for Occupational Orientation should alleviate this problem, if local districts are made aware of the materials. However, the instructional area most often mentioned as needing improvement was the fifteen clusters. The instructional materials for this area will not be available until the 1985-1986 school year.

3. The use of Occupational Orientation as a method for increasing nontraditional enrollments must be emphasized. Administrators responding to this study did not report that their units were being used to reach sex equity.

4. It was extremely difficult to communicate with local education agencies about their Occupational Orientation programs due to the great variation in local program titles. Many local professionals filled out the wrong questionnaire because they did not know the difference between occupational investigation and occupational exploration. Standardization in course titles should be mandatory for new units being approved. This will be even more important with the advent of the prevocational classes being incorporated into the vocational system. Also, the emerging use of occupational investigation for computer literacy may motivate local districts to rename their classes.

Based on the research completed for this project and the research discussed in Part I, "The Review of Literature," the following recommendations are made for evaluating the effects of Occupational Orientation on students.

1. Researchers must be cognizant of several factors when using the CMI to measure the progress of students in Occupational Orientation.

(a) The sixth-grade reading level makes it difficult for some junior high students.

(b) A posttest-only design to compare Occupational Orientation students with academic students may not be valid due to initial low career maturity scores registered by students electing to take occupational investigation.

(c) The retesting—pretest and posttest using the same instrument—did not cause test bias in this research, but it may have caused older students to not take the posttest seriously.

(d) The worth of pretesting and posttesting must be weighted against the time involved. A minimum of five hours is necessary—nearly 7 percent of instruction for an average occupational investigation class.

2. When used for remediation purposes, occupational investigation should be offered as a thirty-six week (full-year) course of study. Research has supported the observation that students in occupational investigation for one year or two years showed an increase in career maturity scores. It has been found in previous studies that it took at least two semesters of occupational investigation to improve career maturity scores.

3. The Career Maturity Inventory should be used for diagnostic purposes only and not as a measure of competency attainment. This is especially true if, as was the case with this research, students electing to take occupational investigation, have very low career maturity scores on the CMI. Using the CMI at the beginning of the class would enable teachers to adapt existing instructional areas to individual student needs.

4. The most effective method to measure the effectiveness of Occupational Orientation is to design specific competency tests based on the actual curriculum content of occupational investigation and occupational exploration.

5. Increasing units of Occupational Orientation should be encouraged. Positive changes are taking place in a significant number of students due to the instruction they receive in the program.

Bibliography

1. Crites, John O., Career Maturity Inventory Administration and Use Manual, California, McGraw-Hill, Inc., 1973.

2. Hollenback, Kathryn, "Assessment of Occupational Exploration Programs and Resource Materials," unpublished materials, Texas Education Agency, Austin, Texas, 1981.

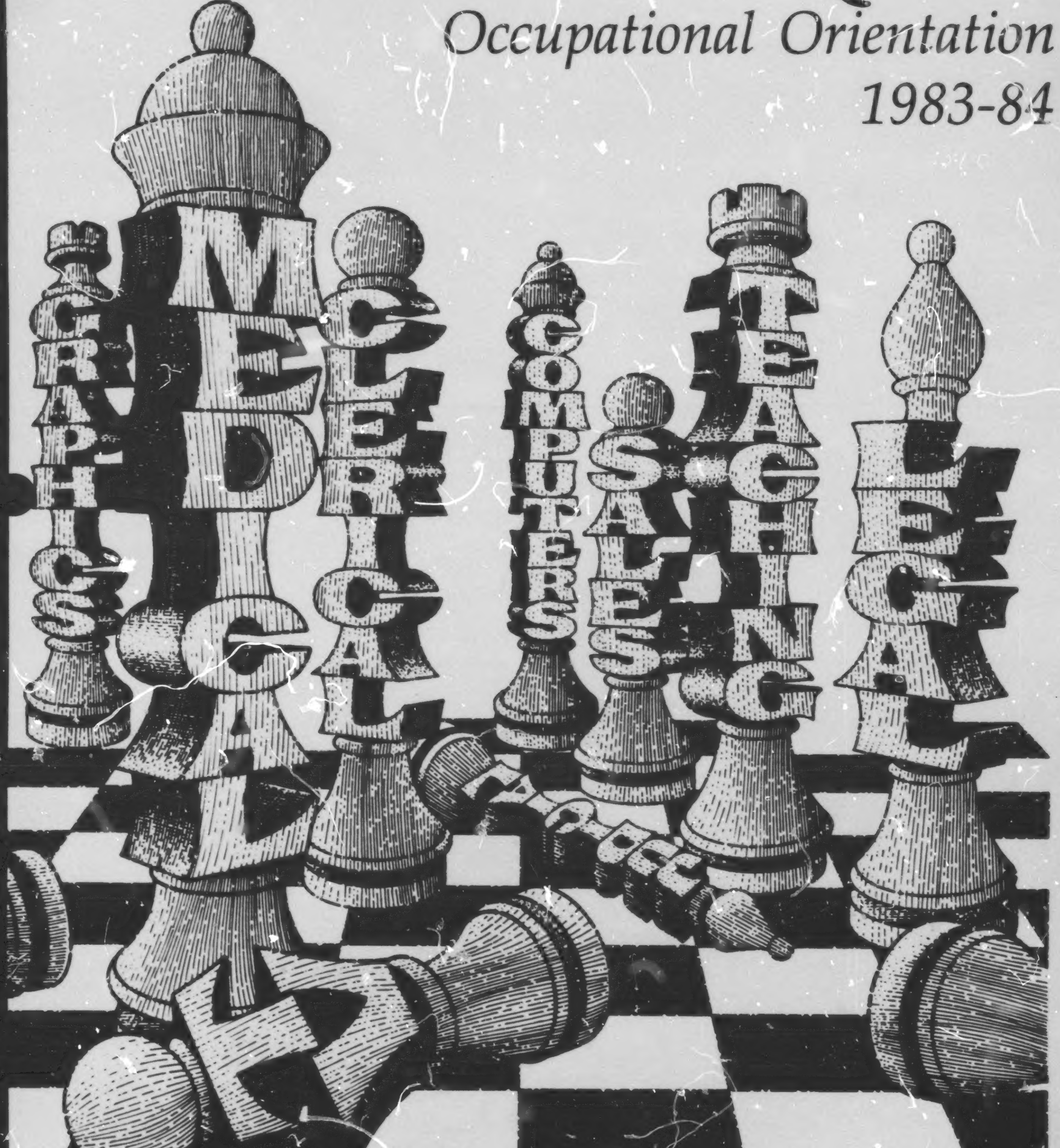
3. Hollenback, Kathryn, "An Assessment of Occupational Orientation Investigation Activities and Course Content at the Local Level to Determine Its Effectiveness," unpublished materials, Texas Education Agency, Austin, Texas, 1980.

4. SPSS, Inc., SPSS^x: A Complete Guide to SPSS^x Language and Operations, New York, McGraw-Hill Book Company, 1983.

THE STATUS QUO

Occupational Orientation

1983-84


GRAPHICS
MEDICAL
CLERICAL
COMPUTERS
SALES
TEACHING
LEGAL

V. PROJECT SUMMARY

THE STATUS QUO OF OCCUPATIONAL ORIENTATION PROGRAMS IN TEXAS--1984

The findings, conclusions, and recommendations found in this Summary are based on extensive research conducted from July 1, 1983 to June 30, 1984 at North Texas State University. The research is described and reported in the final report entitled: "Evaluate the Effectiveness of the Occupational Orientation Programs in Texas", project control number: 44420019. The research was funded by the Division of Occupational Education and Technology, Texas Education Agency. All statements can be substantiated by data collected during that research and presented in the comprehensive final report.

Positions and points of view expressed are not necessarily those of the Texas Education Agency and no official endorsement by the Agency should be assumed or inferred.

Kathryn Hollenback, Ph.D.
Project Co-Director

SUMMARY

Table of Contents

INTRODUCTION..1

LOCAL OCCUPATIONAL ORIENTATION UNITS........................2

CURRICULUM DEVELOPMENT..4

TEACHER CERTIFICATION..6

PROGRAM MANAGEMENT..10

PROGRAM EVALUATION..12

RECOMMENDATIONS..16

Curriculum..16

Teacher Certification..17

Program Management..18

Evaluation..19

CONCLUSION..21

SUMMARY

Table of Figures

FIGURE 1: School Districts Having Partial, Full, or Multiple Units of Occupational Orientation........................2

FIGURE 2: Amount of Instruction Received on Selected Topics by Occupational Orientation Teachers in Certification Course Work..7

FIGURE 3: Questions Asked of Local I.S.D. Professionals Regarding Program Management.............................10

FIGURE 4: Responses from Local I.S.D. Professionals Regarding Program Management......................................11

INTRODUCTION

The educational system in Texas should be proud of its Occupational Orientation program. It is a vocational guidance activity viewed by many educators in the United States as innovative, valuable, and most important, beneficial to students. Although many states instituted similar programs in the dawn of career education, Occupational Orientation has emerged and evolved into a viable method of providing career and educational guidance to young people in Texas. It may have suceeded where others faltered because it grew from the general principles of career education to a pre-vocational guidance activity that fulfills many needs of students, teachers, and administrators.

However, the program is not without its problems. The biggest and most detrimental has been the lack of qualitative evaluation. What is known and assumed by professionals involved in Occupational Orientation must be proven to others. With the advent of the educational reform movement in Texas, Occupational Orientation is being challenged to prove its value in a changing educational environment.

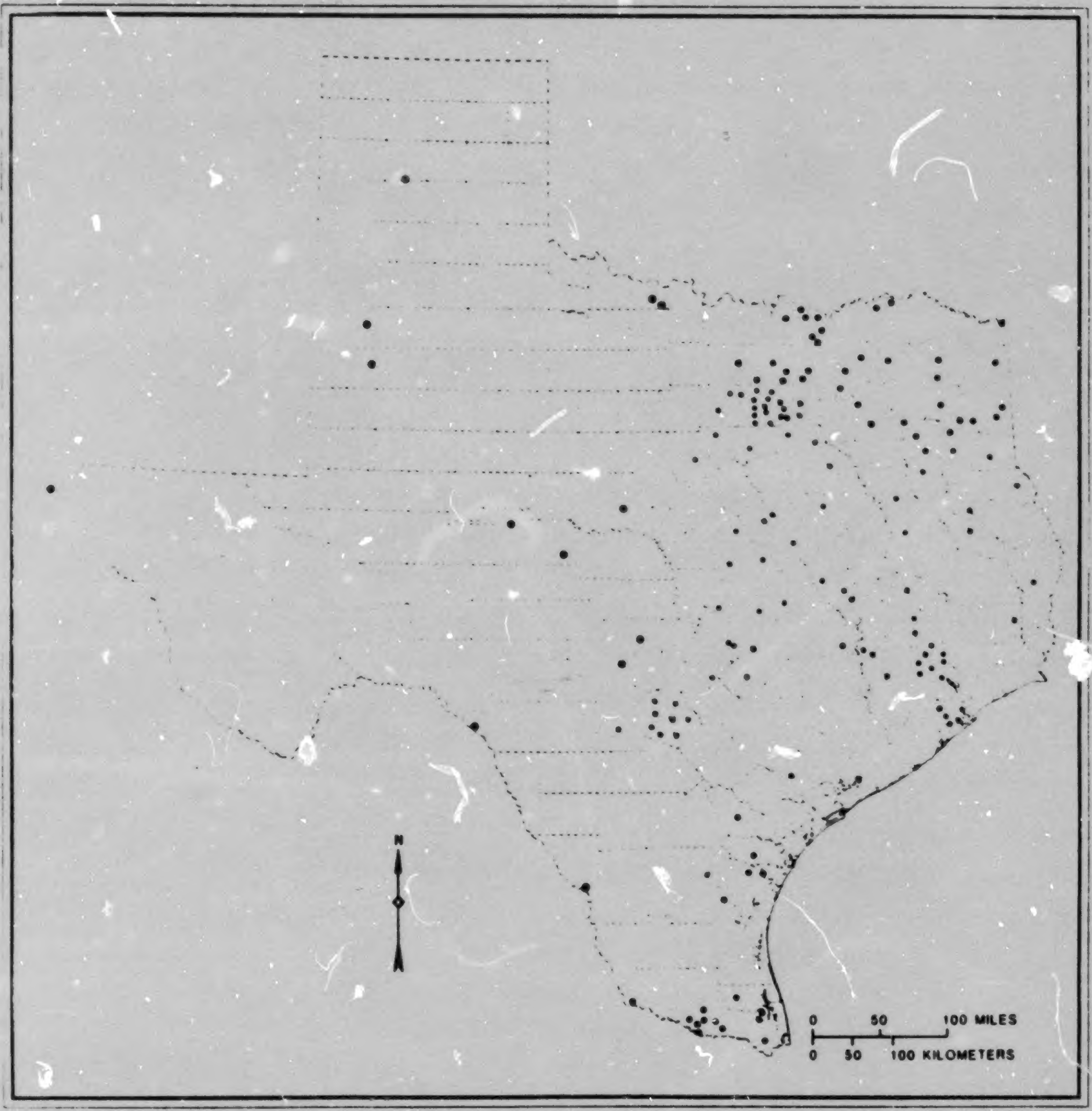
The purpose of this report was to evaluate the effectiveness of Occupational Orientation in Texas and make recommendations for future research and development. To accomplish this a holistic research approach was undertaken. Each component associated with Occupational Orientation was examined: research, curriculum development, teacher education and pupil appraisal. All this was necessary in order to identify the status quo and provide a foundation for program improvement.

Local Occupational Orientation Units

Because Occupational Orientation began as a hodge-podge of career education classes funded by exemplary funds, its exact parameters have always defied description. Although there were general objectives and requirements, exceptions came close to being the rule. The one rule without exceptions was--Meet the needs of students. But as altruistic as this sounds, it has led to many of the difficulties in the program and made it into a management headache. For in order to evaluate something, a standard must exist to measure against. Until H.B. 246, there have been no consistent standards for Occupational Orientation.

In order to get a clear picture of how Occupational Orientation units were organized, managed, and offered to students, all 149 local education agencies received vocational education funds to support 273 units of occupational investigation and 58.5 units of occupational exploration. (See Figure 1.) In those

FIGURE 1: School Districts Having Partial, Full, or Multiple Units of Occupational Orientation.


N
0 50 100 MILES
0 50 100 KILOMETERS

units, fifty (17.7 percent) of the occupational investigation teachers were teaching the class for the first time. Twenty-two (36.0 percent) of the occupational exploration teachers were new to the course.

To identify the variations in the instructional organization of Occupational Orientation classes, several questions were asked. There was a great deal of diversity, not only from district to district, but within districts as well. It was determined that occupational investigation classes ranged from 45 to 60 minutes in length with nearly half of the districts reporting a class length of 55 minutes. There was a bigger range in the times reported for occupational exploration units--from 45 to 180 minutes in length. Fifty-three percent of the units were 55 minutes in length. Also, the length of the classes in weeks displayed diversity. It was reported that occupational investigation classes were taught from six to thirty-six weeks with an eighteen week length being most common. Occupational exploration ranged from nine to thirty-six weeks in length with thirty-six weeks being reported most often.

School districts fund both occupational investigation and occupational exploration differently. It appeared that some districts depended more on the four hundred dollars of instructional funds than others as demonstrated by the range of funds reported. Local districts reported budgeting funds from a low of $50.00 per unit to a high of $5,000 per unit for occupational investigation. The mean was $996.71 per unit. Twenty-three and a half units reported $1,000 per unit being budgeted for occupational exploration. This figure represented the mode.

Although reallocation requirements require a minimum amount of students per unit, there was a wide range of students reported per class. The average number of students per occupational investigation class ranged from 5 to 175 and for occupational exploration from 10 to 75. Local professionals reported that from 16 to 6,500 students would complete occupational investigation at the end of the 1983-1984 school year in their districts and 18 to 2,000 students would complete occupational exploration.

It was very difficult to communicate with local school personnel in regard to their programs. Occupational investigation was designated by ten different titles at the local level. Occupational exploration had separate titles due to the nineteen different career areas covered by the units. Some of these areas were the same, but differed in scope . The boundary between skill training and exploratory experiences has become more and more blurred. A developing trend is to use occupational exploration and, in some cases, investigation to teach computer literacy.

Although specific numbers were not required, local districts were asked to rank order the special populations their programs served. It was determined that both courses of study served approximately the same special populations when compared by rank order. Disadvantaged appeared to be the largest special population served and handicapped was the smallest. There were three V.E.H. units of occupational investigation and five for occupational exploration.

Curriculum and instructional materials have been developed on the assumption that students taking Occupational Orientation classes are "beginning" students with little or no previous knowledge of the subject matter. But some school districts are allowing students to repeat the classes. Only one school district reported that students who had successfully completed occupational exploration could repeat the course. However, 24 of the 148 school districts responding to the question allowed students to repeat occupational investigation in some or all of their units. This figure represents 16.2 percent of the school districts and represents a large number of students. (In reality, this number may actually be larger than was reported.)

Because of the diverse structuring of local programs of Occupational Orientation, districts were asked to state their perceived purpose of occupational investigation and occupational exploration. There was more standardization in the perceived purpose of the courses than in the structuring of classes. Career awareness was the most often reported purpose for occupational investigation with considerable mention given to planning for career choice, high school scheduling and career decision making. Occupational exploration was reported to offer students opportunities for "hands-on" laboratory skills to determine career interests and to explore vocational training options available to them in high school.

Curriculum Development

Some federal monies have been budgeted for curriculum development in the past in rather a most interesting order. The first major funding was for instructional materials and considering the time and money allowed for development, their worth was extraordinary. Next came a curriculum outline for occupational investigation that, for some reason, was never fully disseminated to local units. It was not until this school year that the Occupational Curriculum Laboratory at East Texas State University was funded to produce a comprehensive curriculum with instructional materials for Occupational Orientation. This should have a positive impact on the quality of instruction for occupational investigation and should help occupational exploration somewhat.

Curriculum and instructional needs in the field center around the desire for specificity--stated goals, objectives, textbooks with workbooks and pretests and posttests for instruction. Teachers also expressed needs for information on teaching limited English proficiency students and computer applications for use in Occupational Orientation.

The instructional materials developed for occupational investigation by the Occupational Curriculum Laboratory have fulfilled their function well. Teachers had no need for "instructional activities", of the type originally developed. This plus the continued emphasis on new and innovative instructional activities at in-service and strength of the "Methods and Media" certification course have made instructional strategies the strongest point in the teaching of Occupational Orientation.

The Occupational Orientation teachers on the Project Advisory Committee expressed concerns about the diversification of both occupational investigation and occupational exploration programs at the local level. Adapting existing materials to variations in course length, grade level, and student populations has been a problem.

Business and industry representatives advised that specific occupational information on many occupations in computer technology becomes obsolete rapidly and predicting future occupations would be nearly impossible. They did urge that the importance of communications skills, both verbal and written, be emphasized and human relations skills be stressed.

There have been no specific curriculum or instructional activities developed for occupational exploration. A rather comprehenisve annotative bibliography was developed which listed instructional and curriculum materials developed by private, commercial, and public agencies. The entries were based on needs identified by occupational exploration teachers.

Although this method may have been of some benefit to the approximately 45 occupational exploration programs it may have also contributed to some of the instructional difficulties being experienced by occupational exploration teachers. Students, especially in the industrial-technical courses are not aware that they are in a career exploration class; they identify the class as being industrial arts or shop. Many of the teachers come from an industrial arts background and teach accordingly.

Because the teachers sometimes use instructional materials originally developed for skill building courses, the actual purpose of career exploration may becoming secondary. It is imperative that occupational exploration teachers be encouraged to attend inservice meetings and that inservice make special provisions to offer sessions developed for occupational exploration.

Teacher Certification

Occupational Orientation teachers who attended the Vocational Guidance Personnel Workshop held July 31 through August 3, 1983 were asked to complete a questionnaire on teacher education. The questionnaire consisted of a demographic section, a replicated survey,and a survey to solicit current information on teacher education and training in the State.

When the responses from the replicated survey were compared to the original study completed in 1980, it was found that the teachers in 1983 perceived much of their teacher education more favorably. Many of the responses were significantly different. The "Methods and Media" and "Occupational and Vocational Education Information" courses appeared to have the most usefulness to teachers in the areas of planning and organizing their classes and in the day-to-day operation of their classes. It is interesting to note that the "History and Principles" course was perceived as the least practical and relevant of the certification courses and was also perceived as a well-organized, developed and presented course.

The objective evaluation of the certification courses was very positive. If there was any "weakness" it appeared to be in the area of textbook relevancy. However, even the responses for this area were high.

As expected, respondents did not perceive any need for additional certification course work to prepare Occupational Orientation teachers. There was less than one percentage point difference in the number of respondents answering this question in 1980 and 1983. In 1983, 72.4 percent of the respondents did not perceive the need for additional courses.

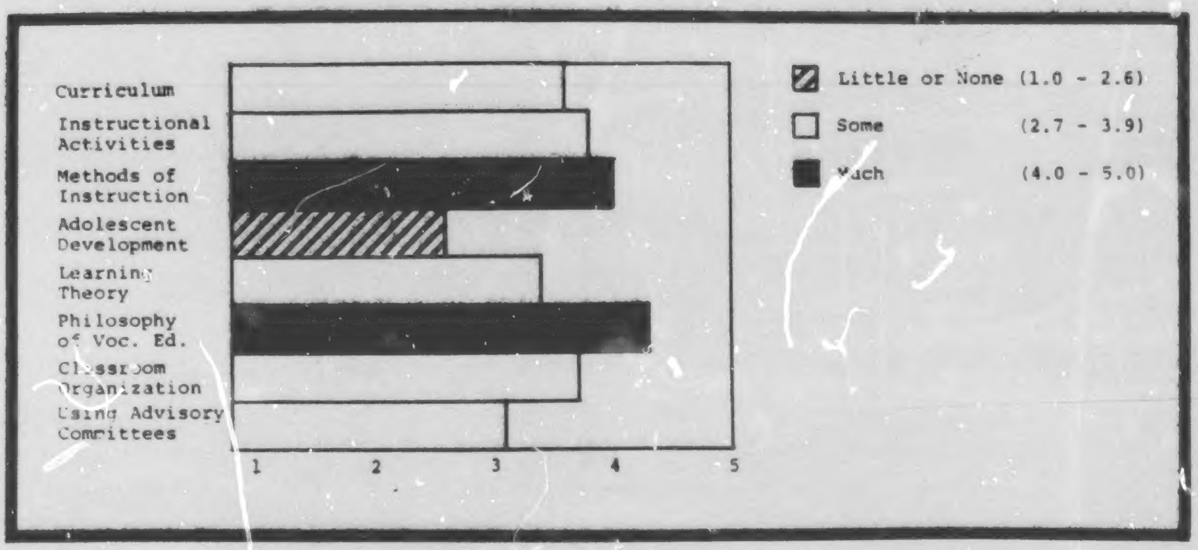
There has been no change in the problems the respondents experience in becoming certified. Certification courses not being offered at institutions that were convenient to teachers continued to rank as number one and conflicts in scheduling of required courses was second. However, there was an 18 percent drop in the frequency of respondents who designated institutional convenience as being a problem. This same "problem" was identified when respondents designated possible improvements to the certification program. Over 50 percent of the teachers indicated offering required courses at centralized locations would improve the teacher certification process.

The greatest change in responses from 1980 to 1983 was in the respondents' perceptions of the roles and duties of teacher educators. In 1980 the first ranked role/duty was to provide information and/or assistance regarding resource persons. This response was ranked fourth in 1983 and providing both preservice and inservice to teachers was ranked highest. Providing on-site technical assistance was ranked fifth in a total ranking of six places.

To solicit more specific information, additional and "open-ended" questions were asked of the respondents. Teachers were asked to rate eight areas of instruction in light of the education received in certification courses. Methods of instruction and philosophy of vocational education were the two instructional areas perceived to have been covered the most. Using advisory committees fell in the "some" range and adolescent development, the lowest rated, approached the "none" range.

In response to "open-ended" questions concerning the certification courses offered in Occupational Orientation, teachers responded with a variety of answers. Their comments indicated that there were competencies not taught in the certification courses. (See Figure 2.) The competencies most often mentioned in the open-ended section were: (1) more instruction in the area of classroom

FIGURE 2: Amount of Instruction Received on Selected Topics by Occupational Orientation Teachers in Certification Course Work.



management and discipline techniques; (2) help with public relations in the public school setting; (3) more sharing of different teachers' ideas; (4) more hands-on experience when teachers are to teach occupational clusters; (5) more information on sources of audio-visual materials; (6) instruction on record keeping, filing, budgeting and follow-up on students; and (7) use of computers in the classroom. An area of instruction in the certification courses that proved to be of little value to teachers of Occupational Orientation was the "History and Principles" course. However, several respondents stated that even though the course was not helpful to them in teaching their classes, it provided them with valuable background information as professionals in vocational education. It was suggested that the content of this course be offered in a weekend workshop.

A few respondents felt that due to the instructional approach used by the instructor the "Methods and Media" course and "Planning and Organizing Programs of Vocational Guidance" were not relevant to Occupational Orientation.

Suggestions for changes in the content of Occupational Orientation teacher certification courses include: (1) condensing some of the courses into weekend workshops or into fewer courses; (2) adding more instruction on computer use and future trends in the job market; (3) more hands-on experience with an industry; (4) more instruction for teaching of the handicapped; and (5) more teaching skills, updated curriculum, and public relations with school personnel.

The findings from the evaluations of teacher certification programs for Occupational Orientation provided evidence that there was a great deal of disparity between the teacher education offered by the various teacher certification institutions. There was little consistency in either the subjective or objective evaluations made by teachers regarding the preservice or inservice training.

Even though Occupational Orientation teachers receive one of two certifications--occupational investigation or occupational exploration--the training they reported receiving seemed to have very little commonality in content or quality. The dichotomy of responses given by the teachers surveyed gives evidence that some certification programs are doing an excellent job and others are not.

Currently the ultimate responsibility for competent teacher education rests in the hands of a small number of certifying institutions. It appears that when the teacher certification institutions address the areas indigenous to Occupational Orientation (or vocational guidance) teachers are satisfied with their education/

training. When they do not, teachers do not appear to be adequately trained to teach Occupational Orientation. Ultimately students suffer, programs wither and many times are dropped.

It is further apparent that merely completing a required number of courses does not guarantee a trained teacher who possesses competencies needed to teach Occupational Orientation courses. The data suggest that many times teachers are not exposed to the training they perceive as being necessary to teach Occupational Orientation courses. Based on the comments made by many teachers, it seems that some of the teacher training is violating basic vocational education tenants. "The instructor must have had successful experience in the application of skills and knowledge in the operations and processes he undertakes to teach" (Prosser). This was illustrated by a comment made by one of the respondents: "If V.E.H. occupational exploration units are going to be allocated, then teacher training for the unit is essential."

Before many of the problems can be solved, the presence of a dilemma must be acknowledged. Potential teachers find the inconvenient locations of teacher training institutions to be the greatest problem in their certification process. However, a proliferation of new approved certification programs to meet teachers' needs may do more harm than good. With the decrease in new units approved and the stabilizing of current units, fewer new teachers are needed. (In 1979, 40 percent of the teachers were not certified--they were either first or second year teachers. During the 1983-84 school year, 16 percent of the occupational investigation teachers were first year teachers and 36 percent of the occupational exploration teachers were new.) Based on economic considerations, institutions that attract few Occupational Orientation teachers will place them in vocational education classes with a more generic appeal. The neophyte teachers will not be exposed to specific Occupational Orientation training. Teachers who do not receive their certification courses from teacher educators with backgrounds in Vocational Guidance or Occupational Orientation will have a negative effect on the quality of instruction ultimately received by students in the indiviudal school districts.

It may take more than improving existing models of preservice and inservice programs. New vehicles of education and training may have to be developed. Inservice activities could play a major part in improving teachers of Occupational Orientation. It seemed to have played an integral part in improving instructional strategies in the classrooms, but has not addressed some of the more specific concerns as indicated by classroom teachers.

BEST COPY AVAILABLE

Program Management

At the same time vocational professionals at the local level were being asked to provide demographic and instructional information about their Occupational Orientation units, they were asked for their "opinions" about several issues related to the quality of Occupational Orientation programs. Their input was solicited confidentially. The only identifying information asked of them was their professional title.

Figure 4 details the responses from 14 administrators, 89 vocational administrators, and 32 teachers and counselors to the questions listed in Figure 3.

FIGURE 3: Questions Asked of Local I.S.D. Professional Regarding Program Management.

1. How clear are the Texas Education Agency's Program Objectives for Occupational Orientation?

Very Clear _____ _____ _____ _____ _____ Not Clear

2. How effective is the Occupational Orientation Program in meeting the occupational information needs of all types of students?

Very Effective _____ _____ _____ _____ _____ Not Effective

3. How strong is your Occupational Orientation Program?

Very Strong _____ _____ _____ _____ _____ Weak

4. To what degree is Occupational Orientation being used to increase non-traditional enrollment in vocational education classes?

A Great Deal _____ _____ _____ _____ _____ Not At All

5. How much are high school counselors involved in the Occupational Orientation Program?

A Great Deal _____ _____ _____ _____ _____ Not At All

6. How well is the Occupational Orientation Program understood by the academic teachers?

Very Well _____ _____ _____ _____ _____ Not At All

7. Is the Occupational Orientation Program used as a "dumping ground" to place students who are not succeeding in other classes?

Very Often _____ _____ _____ _____ _____ Never

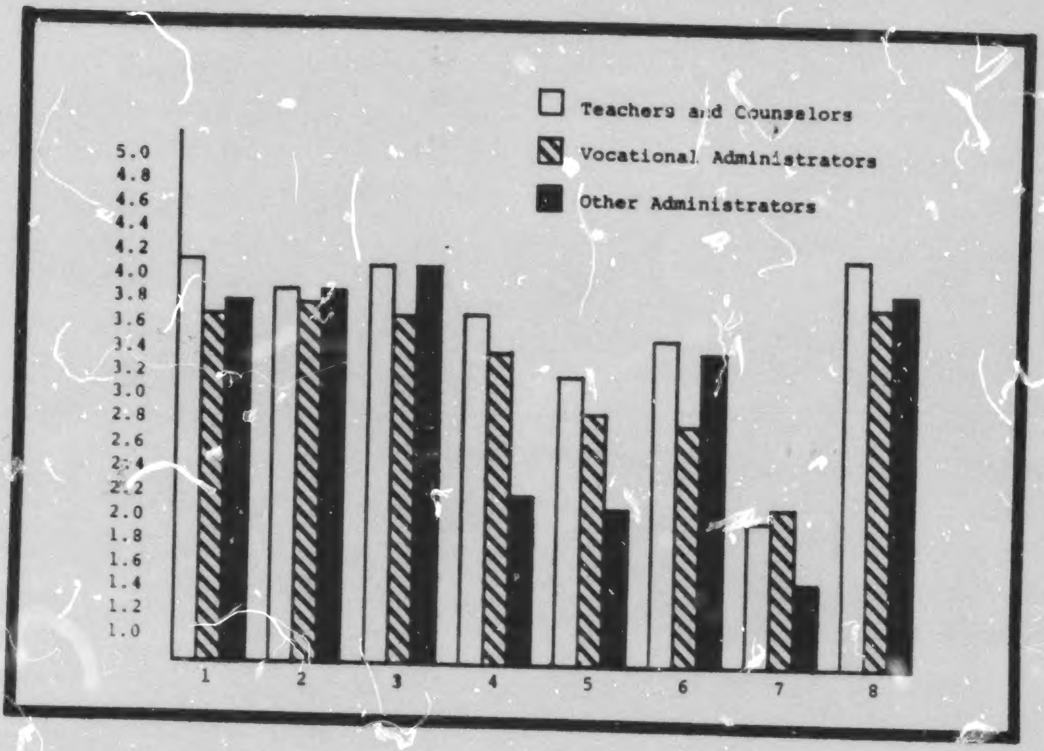
8. How well are the teachers in the Occupational Orientation Program trained?

Very Well _____ _____ _____ _____ _____ Poorly

All three groups felt their Occupational Orientation programs were "strong" and effective in meeting the occupational information needs of all types of students. However, administrators did not feel that Occupational Orientation was being used to increase non-traditional enrollment in vocational education classes; teachers and counselors did to a greater extent, as shown in Figure 4.

There was a negative response to the question regarding high school counselors' involvement in the Occupational Orientation program. Also, vocational administrators to the greatest degree, and the other two groups to a lesser degree, reported that Occupational Orientation may not be understood by academic teachers. All three groups, expecially teachers and counselors, reported that Occupational Orientation teachers were trained very well.

FIGURE 4: Responses from Local I.S.D. Professionals Regarding Program Management.



Additional information gathered from the same questionnaire found recommendations that occupational investigation should be required of all students. However, several comments questions the merit of offering occupational investigation to seventh graders. Mixing grade levels was reported as not being desirable at the junior high or middle school level. Also, there were problems reported caused by the occupational investigation classes being placed under the control of building principals and not vocational administrators.

Public relations within and outside the schools was described as a weak area. Nearly every group (with the exception of students) associated with Occupational

Orientation was reported as "not understanding" the program. Counselors, vocational directors, principals, academic teachers, parents, and community members were identified as not understanding what the program was all about.

Items relating to budgeting were singled out several times as were many aspects relating to field trips. Field trips were perceived as being a valuable instructional tool, but teachers were encountering many difficulties trying to organize the actual trips.

PROGRAM EVALUATION

After thriteen years of operation, there has never been a "definitive" study on how well the Occupational Orientation program has met the state goals. In fact, there has been very little evaluation of any aspect of the program at any level. Although program evaluation and mandatory follow-up of students was listed in the Program Standards for Vocational Guidance, the majority of local school districts did not comply. The V.E.E.S. will provide the first major qualitative data on Occupational Orientation.

There have been several studies completed by graduate students, a few school districts, and the Agency. The studies were so diverse in whom and what was studied, that it was difficult to generalize the findings. There were some commonalities that surfaced--the major ones being process rather than product.

When the variables of reading level or other variable related to academic success for controlled for, Occupational Orientation students being measured by career maturity showed significant improvement after completing the course--the longer the course, the greater the gain. When O.O. students were compared to "academic" students by posttest scores only, they did not fair so well. Some studies generalized that the treatment (completing an Occupational Orientation course) had no effect on the variables being measured. However, a close examination of the data revealed that students enrolled in elective Occupational Orientation courses have lower career maturity scores and may very well represent a population with lower "academic" skills.

These factors may have had some bearing on the findings of the study by Bearden. In the only study completed on occupational exploration and occupational investigation, he found that Occupational Orientation courses did not materially affect the career maturity of ninth-grade male students in Greenville I.S.D. Length of course exposure and race were also evaluated. His conclusion was reached by comparing the Career Maturity Inventory scores of ninth-grade "academic" students and those who had completed one or two years of Occupational Orientation. Part of his findings supported the conclusion that the planning ability of students who completed two years of Occupational Orientation "appeared to have deteriorated."

Barnes found that students who completed two semesters of occupational investigation demonstrated a significant gain in CMI scores over one-semester students. There were also significant gains in the Competence Tests of the CMI of students who completed one semester of occupational investigation versus those who did not. He concluded that evidence indicated that occupational investigation affected the career maturity of students.

Magill also found a positive effect on the career maturity of seventh- and eighth-grade students who completed occupational investigation. They scored significantly higher than the control groups who did not take the class. All black and female students scored significantly higher than blacks and females in the control group. Males in the experimental group scored higher, but not significantly so.

Gabryl, in a study completed for North East I.S.D., administered an adaptation of the CMI Attitude Survey to a control and experimental group of seventh-grade students. He concluded that students enrolled in an occupational investigation class had a significantly higher development of positive attitudes toward work and choosing careers as compared to other students.

When students enrolled in occupational investigation and band at Northwest I.S.D. were compared, their career attitudes were virtually the same. It was assumed the band students would score higher, but they did not. The occupational investigation students who had completed twelve weeks of training scored higher on the Attitude Scale of the CMI, but not significantly so.

Based on the perceptions of seniors, Witherspoon found that students who had completed occupational investigation scored significantly higher on measurements of six variables. Using matched groups he compared seniors who had completed occupational investigation in the eighth grade with a control group who had not. He concluded that the experimental group was better prepared to set goals with regard to career training, displayed a more positive attitude toward the world of work and dignity of labor, had a better awareness of self than those who did not, were better able to identify career and occupational opportunities, were better able to relate school life to work, and were better able to formulate educational plans.

Lackey found no significant differences in the self esteem scores between an experimental (occupational investigation students) and a control group. However, she did find a significant difference in the scores representing locus of control between the two groups. It should be noted that the treatment--two instructional modules in the occupational investigation instructional areas of self appraisal and the occupational clusters--totaled sixteen hours of instruction. The researcher concluded that "both self esteem and locus of control are difficult to change, and to expect significant changes may require more intensive and longer periods of treatment" (p. 79).

In one of the first evaluations of Occupational Orientation completed by Huffstutler, et al. in 1973 it was concluded that the instruction was apparently very effective. Program personnel interviewed felt that student participants did significantly change their attitudes toward school and there was some objective evidence that the programs had some impact upon students' enthusiasm for learning. Also, the attitude of student participants toward the world of work and the dignity of labor and occupations did improve somewhat significantly during the program.

In two curriculum research studies completed by Hollenback, ancillary information gathered provided evidence that both occupational investigation and occupational exploration programs at the local level were very diverse in their organization and philosophy. Forty-four percent of the occupational investigation units were required. Nearly three-quarters of the occupational investigation teachers did not use advisory committees for curriculum input.

In a pilot study to evaluate the Vocational Education Evaluation Survey, a small number of school districts in south Texas evaluated their Occupational Orientation Programs. There were several areas that were evaluated as strengths for both occupational investigation and occupational exploration. These areas include sex equity and meeting the needs of special populations. The occupational investigation programs were rated high in their delivery of instruction. However, neither program had made use of their advisory committees for review of program goals and instructional objectives. Another weakness in both programs was lack of local education agency program review by administering a follow-up survey to senior students.

Six evaluations or follow-up studies completed by local education agencies demonstrated an over-all positive picture of the effects of Occupational Orientation. White Settlement I.S.D. surveyed their graduating seniors to evaluate the students' experiences in occupational investigation. Their responses were favorable. Over 50 percent reported they would recommend the class to others.

Commerce I.S.D. surveyed students as they finished an occupational investigation program. Again students' responses were very favorable and the instruction they received was perceived as being good.

From follow-up data gathered by the vocational director, a large percentage of students enrolled in the Greenville I.S.D. occupational exploration program enroll in the District's skill training programs for further training. The only exception to this was the electronics laboratory.

Both occupational investigation and occupational exploration programs were evaluated locally by North East I.S.D. in San Antonio. High school students were asked to evaluate their experiences in occupational investigation taken in seventh grade. A majority of students were aware of the course objectives and felt they received adequate instruction in the study of occupations and in planning for their successful entry in the world of work.

The results of the occupational exploration survey were also generally positive regarding both the course and instructor. However, one major finding was that the majority of students did not see the course as a career exploratory program but as a shop class or more specifically as industrial arts.

Based on the recommendations made by the teacher members of the Project Advisory Committee, the Career Maturity Inventory was administered to their students as a pilot study to ascertain the feasibility of using the instrument for a statewide evaluation. Students enrolled in five different types of Occupational Orientation programs were tested using a pretest/posttest, posttest only design. Six areas were tested by use of subtests including: Attitude Test, Knowing Yourself, Knowing About Jobs, Choosing A Job, Looking Ahead, and What Should They Do?.

Of the five individual schools, two showed significant increases. Seventh- and eighth-grade students enrolled in a year-long occupational investigation course showed significant increases in maturiy scores on four of the subtests: Knowing Yourself, Choosing A Job, Looking Ahead, and What Should They Do?. Eighth-grade students enrolled in a required occupational investigation class scored significantly higher on three of the subtests: The Attitude Test, Choosing a Job, and Looking Ahead. Students in one-semester elective occupational investigation classes in the eighth grade and high school did not show significant gains. Students in an occupational exploration class also did not show a significant gain in scores.

When the pretest and posttest scores of the entire group were compared, (four of the five schools) significant increases were found on four subtests:

The Attitude Test, Choosing A Job, Looking Ahead, and Planning Ahead. There was close to a two-point increase in the percentile scores of students on Choosing A Job.

Although the results were positive, the value of using the CMI was questioned. Its value lies in its intended purpose--diagnosing individual student's needs in relating to career maturity. Because Occupational Orientation is a unique vocational education experience, the most appropiate measure of its effectiveness would be a competency test based on the stated learning objectives for each course of study.

RECOMMENDATIONS

Curriculum

In order for both occupational investigation and occupational exploration to remain a viable part of the comprehensive system of vocational guidance in Texas, specific curriculum development must continue. Future curriculum development for Occupational Orientation should:

1. follow federal legislation priorities and develop materials for teaching handicapped and disadvantaged and students with limited English proficiency;
2. be structured, using formats such as workbooks, textbooks, instructional outlines listing specific student-learner outcomes, and pre/post tests to measure the attainment of student-learner outcomes;
3. develop and/or identify software for computer aided instruction in Occupational Orientation;
4. approach curriculum development for each phase of Occupational Orientation, investigation and exploration separately, they are two separate and distinct courses and should be viewed as such;
5. identify a goal or purpose for occupational investigation and occupational exploration, reinforcing their distinct difference in approach;
6. not try to create information on specific occupations in the field of computer technology because of the rapid change and impossibility of predicting future occupation descriptions;
7. approach computer technology from the global aspect of computer application being present in nearly all occupations in the future;

8. contain units on the importance of communication skills and human relations skills;
9. develop the same student-learner outcomes and adapt instructional activities for at least three levels: (a) beginning, (b) intermediate, and (c) advanced, to meet the needs of variations in grades seven through twelve and student populations, special education to gifted;
10. be adaptable to variation in course lengths--eight weeks to a full school year;
11. be used in the teacher education programs to prepare Occupational Orientation teachers; and
12. for the purposes of program evaluation, mandate a percentage of the curricula for occupational investigation and occupational exploration for each unit in the State.

Teacher Certification

The quality of individual Occupational Orientation units can be measured by the worth of the teacher. Good teachers produce good programs. A direct impact on the quality of instruction for programs at the local level can be made by improving the inservice and preservice training of Occupational Orientation teachers. Recommendations for improving those endeavors are as follows:

1. The specific competencies needed to teach occupational investigation and occupational exploration should be identified and addressed in all courses offered by approved certifying institutions.

2. More flexibility needs to be built into the certification process such as certification courses and regional inservice offered on weekends, regional special institutes, accelerated classes, personalized learning through service centers, etc.

3. Teacher evaluation in certification courses should be competency-based with some type of documentation to demonstrate proficiency.

4. Individual university programs of teacher certification need to be evaluated on factors other than quantitative aspects.

5. As requested by teachers, classroom management/discipline and adolescent development as it affects learning should be included in the instructional content of certification courses, especially for those individuals seeking certification who have not previously been teachers.

6. Training in actual computer use and application (not just affective elements) should be included in certification and inservice.

7. Actual materials developed for occupational investigation and occupational exploration such as curriculum/instructional materials, research reports, program standards, etc. should be used in the certification courses for instructional support.

8. A teacher observation procedure or other activities to allow on-site support and review from teacher educators should be offered for individuals coming from business and industry and having never taught before.

9. More emphasis should be placed on training teachers to use advisory committees and public relations within the schools and communities.

Program Management

Based on the input received from each school district receiving state funds to support a partial, full or multi unit Occupational Orientation program several areas needing improvement were identified. Many of the problems described can be solved by improving communications within the school districts with help from other agencies. The following recommendations are made as possible solutions to difficulties being experienced by local education agencies when managing their Occupational Orientation programs.

1. School districts need more on-site technical assistance. Most problems identified were endemic and not statewide or widespread. Therefore, individual help is needed in many cases. New units expecially need help in getting started. Also, first year teachers need help. Many of them teach for a full year without the benefit of certification classes or inservice.

2. Inservice activities need to be increased and improved. Teacher educators need to become more involved in local school district inservice for Occupational Orientation teachers. Also, inservice activities for vocational and other administrators need to be offered to help them better manage Occupational Orientation programs.

3. A public relations/communications handbook needs to be developed for Occupational Orientation teachers. Nearly every professional group inside districts and the public was identified as not understanding the program and surprisingly, counselors do not appear to be involved as much as they should be in Occupational Orientation programs.

4. Alternatives to the traditional field trip must be developed. Many

districts do not have enough resources (personnel, vehicles, budget) or administrative support to take students on field trips.

5. Both occupational investigation and occupational exploration are not designed for students to repeat the class, but currently 16 percent of the districts are allowing students to repeat the classes, many times with students taking the class for the first time. Either this should be discouraged or additional instructional materials and curriculum needs to be developed to meet the needs of "second year" students.

6. The goals established by the Texas Education Agency appear to be clear to most personnel in the local education agencies, but instructional objectives are not. House Bill 246 and the new curriculum materials being developed for Occupational Orientation whould alleviate this problem, if local districts are made aware of the materials. However, the instructional area must often mentioned as needing improvement was the fifteen clusters. The instructional materials for this area will not be abailable unit the 1985-86 school year.

7. The use of Occupational Orientation as a method for increasing nontraditional enrollemnts must be emphasized. Administrators do not see the courses being used to reach sex-equity.

8. It was extremely difficult to communicate with local education agencies about their Occupational Orientation programs due to the great variation in local program titles. Many local professionals filled out the wrong questionnaire because they did not know the difference between occupational investigation and occupational exploration. Standardization in course titles should be mandatory for new units being approved. This will be even more important with the advent of the prevocational classes being incorporated into the vocational system. Also, the emerging use of occupational investigation for computer literacy may motivate local districts to rename their classes.

Evaluation

Personal testimony and individual success stories abound in the field on the value of Occupational Orientation. However, actual objective data are difficult to find. The ramifications of thirteen years of program development without accompanying evaluation was felt during this--the year of H.B. 246. There appeared, briefly, an opportunity to have either occupational investigation or occupational exploration required for school districts offering vocational training. But, the worth and/or effects of Occupational Orientation could not be successfully demonstrated. What resulted was another prevocational course being approved to be offered as an elective--a course which duplicates much that is contained in Occupational Orientation courses.

If Occupational Orientation is to remain a viable part of the Texas Vocational Guidance system, more research into the effectiveness of the instruction, evaluation of programs and follow-up of students must be accomplished.

The following specific recommendations are made for future Occupational Orientation program development.

1. More research on Occupational Orientation needs to be undertaken. Support services and/or small grants should be made available to graduate students to encourage research into the effects of Occupational Orientation on students.

2. Original testing instruments which measure the knowledge and skills contained in Occupational Orientation curriculum need to be used when evaluating student performance.

3. An evaluation, follow-up, and research handbook needs to be developed for use by vocational teachers, counselors, and administrators.

4. Local qualitative evaluations should be required for all local Occupational Orientation programs.

5. A follow-up system should be developed for Occupational Orientation students to:

   a. determine how many go into further vocational education courses,
   b. ascertain its effects on non-traditional enrollment, and
   c. measure its use by students for educational planning, job acquisitions, occupational choice, and mastery of economic and employability skills.

6. Researchers must be cognizant of several factors when using the CMI to measure the progress of students in Occupational Orientation.

   (a) The sixth-grade reading level makes it difficult for some junior high students.
   (b) A posttest-only design to compare Occupational Orientation students with academic students may not be valid due to initial low career maturity scores registered by students electing to take occupational investigation.
   (c) The retesting—pretest and posttest using the same instrument—did not cause test bias in this research, but it may have caused older students to not take the posttest seriously.
   (d) The worth of pretesting and posttesting must be weighted against the time involved. A minimum of five hours is necessary—nearly 7 percent

of instruction for an average occupational investigation class.

7. When used for remediation purposes, occupational investigation should be offered as a thirty-six week (full-year) course of study. Research has supported the observation that students in occupational investigation for one year or two years showed an increase in career maturity scores. It has been found in previous studies that it took at least two semesters of occupational investigation to improve career maturity scores.

8. The Career Maturity Inventory should be used for diagnostic purposes only and not as a measure of competency attainment. This is especially true if, as was the case with this research, students electing to take occupational investigation, have very low career maturity scores on the CMI. Using the CMI at the beginning of the class would enable teachers to adapt existing instructional areas to individual student needs.

9. The most effective method to measure the effectiveness of Occupational Orientation is to design specific competency tests based on the actual curriculum content of occupational investigation and occupational exploration.

10. Increasing units of Occupational Orientation should be encouraged. Positive changes are taking place in a significant number of students due to the instruction they receive in the program.

CONCLUSION

Occupational Orientation, like all other education programs in Texas, is at the present time in a precarious position. All educational systems at all levels are in a state of flux brought about by the pressures of educational reform. The Occupational Orientation program must fight for its right to continue. It will, however, take more than its inherent merit to succeed. It must have the necessary leadership and support to improve and grow. Without the proper direction and management, Occupational Orientation will not be able to continue to serve the vocational guidance needs of students in the local school districts of Texas.

To provide the information necessary for Occupational Orientation program planning, direction, management, and evaluation four components of Occupational were investigated in this study: Previous research, curriculum development, teacher education and pupil appraisal. The research identified the needs, strengths and weaknesses to help those responsible for directing the program. The research provided current data from the field for administrative decisions in areas such as inservice, funding, curriculum and personnel development.

12

APPENDIX A

PROJECT ADVISORY COMMITTEE INFORMATION

- Project Advisory Committee Membership
- Invitation Letter to Project Advisory Committee Members
- Project Advisory Committee Meeting Agenda
- Project Advisory Committee Meeting Minutes

BEST COPY AVAILABLE

PROJECT ADVISORY COMMITTEE MEMBERSHIP

PROFESSIONALS

Mr. Arnulfo Balboa, Program Director
Vocational Guidance
Texas Education Agency
201 E. Eleventh St.
Austin, TX 78701

Mr. John Becker
904 Columbia
Montgomery, TX 77356

Ms. Julie Bergstrom
Mary Hoge Junior High School
Weslaco, TX 78596

Mr. Lewis Clements
Route 3, P.O. Box 46
Quinlan, TX 75474

Mr. Steve Crozier
Crozier-Smith, Inc.
Suite 406
3501 North MacArthur
Irving, TX

Mrs. Dona Gallagher
P.O. Box 665
Gatesville, TX 76528

Dr. Al Goodwin
Sam Houston State University
Vocational-Technical Education Dept.
Huntsville, TX 77340

Mr. Frank Haskell
Vice-President and General Manager
Moore Business Systems
P.O. Box 2761
Denton, TX 76202

Mrs. Myra Hasty
Lee Middle School
401 E. Grand Prairie Rd.
Grand Prairie, TX 75051

Dr. Bill Hollenback
North Texas State University
College of Education
Denton, TX 76203

Dr. Webb Jones
Center for Vocational Education
East Texas State University
Commerce, TX 75402

Mrs. Audrey King
5305 Rocky Ridge
Dallas, TX 75241

Dr. Larry Kolb
Southwest Texas State University
Dept. of Occupational Education
San Marcos, TX 78666

Mr. Bill Prewett
Personnel Director
East Texas State University
Commerce, TX 75428

Mr. Will Reece, Exec. Director
Advisory Council for Technical-Vocational Education in Texas
P.O. Box 1886
Austin, TX 78767

Mr. Neal Stewart
Industrial Relations Manager
Sherwood Medical Industries
P.O. 1140
Commerce, TX 75428

Ms. Linda Szot
Arlington Heights High School
4501 N. Rosedale
Fort Worth, TX 76107

Mr. Azil Tipps
Kennedy-Curry Middle School
6605 Sebring
Dallas, TX 75241

Mr. Doug Yett
Acme Personnel Service
1005A W. University
Denton, TX 76201

PROJECT ADVISORY COMMITTEE MEMBERSHIP

STAFF

Dr. Bill Barnes, Director
Occupational Curriculum Laboratory
East Texas State University
Commerce, TX 75428

Ms. Kathy Bresnahan-Lopez
North Texas State University
College of Education
Denton, TX 76203

Ms. Mary Hendrix
Project Coordinator
Occupational Curriculum Laboratory
East Texas State University
Commerce, TX 75428

Dr. Kathryn Hollenback
Project Co-Director
North Texas State University
College of Education
Denton, TX 76203

Dr. James Miller
Project Co-Director
North Texas State University
College of Education
Denton, TX 76203

O.O. ASSESSMENT PROJECT

North Texas State University *Denton, Texas 76203*

College of Education

We are pleased to invite you to serve as a member of the Joint North Texas and East Texas State Universities Project Advisory Committee for Occupational Orientation. You have been recommended as a knowledgable professional whose advise and counsel will be of great benefit to the projects being completed at both Universities.

As a member of the Project Advisory Committee, you will be asked to attend two meetings. The first meeting will be held Saturday morning on October 1, 1983. At this meeting a complete overview of both projects will be given and a work-session will be conducted to solicit your suggestions for Occupational Orientation curriculum development.

We have enclosed several items for your information and review. If you have any questions, please call Dr. Hollenback at (817) 565-3529.

Yours very truly,

James R. Miller

Dr. James Miller
Associate Dean
Project Co-Director

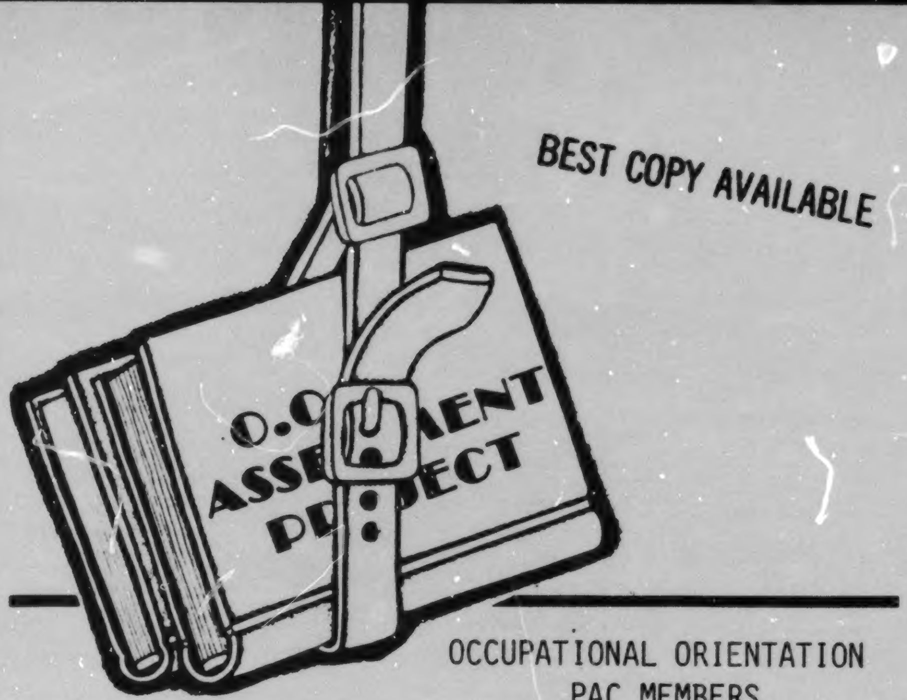
Kathryn Hollenback

Dr. Kathryn Hollenback
Staff
Project Co-Director

enc.

Vocational-Technical Education (817)788-2158

BEST COPY AVAILABLE



OCCUPATIONAL ORIENTATION PAC MEMBERS

Professionals

Mr. Arnulfo Balboa	Occupational Orientation Program Director Texas Education Agency
Mr. John Becker	O.I. Teacher - Conroe ISD
Ms. Julie Bergstrom	O.I. Teacher - Weslaco ISD
Mr. Lewis Clements	O.I. Teacher - Quinlan ISD
Mr. Steve Crozier	Computer Specialist
Mrs. Dona Gallagher	O.I. Teacher - Gatesville ISD
Dr. Al Goodwin	Teacher Educator - Sam Houston State Univ.
Mr. Frank Haskell	Vice-President and General Manager - Moore Business Systems
Mrs. Myra Hasty	O.I. Teacher - Weslaco ISD
Dr. Bill Hollenback	Teacher Educator - North Texas State Univ.
Dr. Webo Jones	Teacher Educator - East Texas State Univ.
Mrs. Audrey King	O.E. Teacher - Dallas ISD
Dr. Larry Kolb	Teacher Educator - Southwest Texas State Univ.
Mr. Bill Prewett	Personnel Director- East Texas State Univ.
Mr. Will Reece	Executive Director - State Advisory Committee
Mr. Neal Stewart	Industrial Relations Manager - Sherwood Medical Industries
Mr. Azil Tipps	O.I. Teacher - Wilmer Hutchins ISD
Mr. Don Yett	Owner - Acme Personnel Service

Staff

Dr. Bill Barnes	Director, Occupational Curriculum Lab East Texas State University
Ms. Kathy Bresnahan-Lopez	Research Assistant- North Texas State Univ.
Ms. Mary Hendrix	Project Coordinator - East Texas State Univ.
Dr. Kathryn Hollenback	Project Co-Director - North Texas State Univ.
Dr. James Miller	Project Co-Director - North Texas State Univ.

O.O. ASSESSMENT PROJECT

OCCUPATIONAL ORIENTATION PROJECT ADVISORY COMMITTEE

AGENDA

SEPTEMBER 30 TO OCTOBER 1, 1983

BUSINESS/UNIVERSITY PAC MEETING

SEPTEMBER 30, 1983
ROOM 225
MATTHEWS HALL
NORTH TEXAS STATE UNIVERSITY

1:45 to 2:00	Coffee and Conversation
2:10 to 2:15	Introduction of PAC Members **Dr. Kathryn Hollenback**
2:15 to 2:50	Overview of Projects **Dr. Bill Barnes** **Dr. Kathryn Hollenback**
2:50 to 3:00	Break
3:00 to 4:00	Round Table Discussion

TEACHER PAC MEETING

OCTOBER 1, 1983
3512 WOODTHRUSH
DENTON, TEXAS

8:30 to 9:00	Coffee and Conversation
9:00 to 9:30	Overview of Projects **Dr. Bill Barnes** **Dr. Kathryn Hollenback**
9:30 to 10:00	Breakfast
10:00 to 12:00	Work Session

O.O. ASSESSMENT PROJECT
North Texas State University   Denton, Texas 76[illegible]03
COLLEGE OF EDUCATION

November 16, 1983

Dear Advisory Committee Member:

I am enclosing the Project Advisory Committee minutes for the meetings held on September 30 and October 1, 1983. The minutes will be included in the Project Final Report to be submitted to the Texas Education Agency on June 30, 1984. If any changes need to be made, please contact me at your convenience and the changes will be made.

Both meetings were extremely informative and very beneficial to both projects. Based on your input a great deal has been accomplished since we met. Five units of instruction have been developed by the Curriculum Laboratory. Some of you will be receiving the units next week for review and field testing. All data used to prioritize the student learner outcomes have been analyzed and the Occupational Curriculum Laboratory staff is working on the student competency profiles at this time.

The Research Project here at North Texas is now focusing on Occupational Orientation Program evaluation. Four different survey instruments have been developed and will be mailed to occupational orientation teachers and vocational administrators. Based on the findings from these surveys and your suggestions, recommendations will be made to the Texas Education Agency for Program improvement.

Thank you for all of your good work. Please contact us if you have any further comments.

Yours truly,

Kathryn Hollenback, Ph.D.
Project Co-Director

enc.

[illegible]

MINUTES

OCCUPATIONAL ORIENTATION PROJECT ADVISORY COMMITTEE

Orientation Meeting

September 30, 1983
Room 255
Matthews Hall
North Texas State University

Mr. Arnulfo Balboa, Occupational Orientation Program Director, Texas Education Agency

Mr. Steve Crozier, Computer Consultant

Dr. Al Goodwin, Teacher Educator, Sam Houston State University

Dr. Bill Hollenback, Teacher Educator, North Texas State University

Dr. Larry Kolb, Teacher Educator, Southwest Texas State University

Mr. Bill Prewett, Personnel Director, East Texas State University

Mr. Neal Stewart, Industrial Relations Manager, Sherwood Medical Industries

Dr. Bill Barnes, Director, Occupational Curriculum Laboratory

Ms. Kathy Bresnahan-Lopez, Research Assistant, North Texas State University

Ms. Mary Hendrix, Curriculum Specialist, Occupational Curriculum Laboratory

Dr. Kathryn Hollenback, Project Co-Director, North Texas State University

---

The meeting was called to order at 2:00 P.M. by Kathryn Hollenback, Project Co-Director. She gave an overview of the research project being completed at North Texas State University and explained how the information from the project was tied to the curriculum development being undertaken by the Occupational Curriculum Laboratory at East Texas State University.

Dr. Bill Barnes, Director of the Occupational Curriculum Laboratory, oriented the Committee to the scope of the curriculum project. He reported that the instructional materials to be developed would cover three of the four instructional areas for Occupational Orientation: self awareness, socio-economic factors and educational planning and decision-making.

Mary Hendrix, Curriculum Specialist of the Occupational Curriculum Laboratory, disseminated the objectives for the curriculum project, a suggested outline for occupational orientation curriculum guides and samples of student competency profiles. The meeting was then opened for discussion.

The consensus was that the competency profiles were a worthwhile idea and would provide: 1) the means for instructors and students to track the skills that the student actually acquired during the class, 2) an aid in articulation between vocational programs at different levels, 3) a method of student evaluation, 4) an outline of the actual course subject matter, 5) a "yardstick" for both teachers and students, 6) a tool to promote more effective teaching, 7) a foundation for program evaluation, 8) students with a tool gain part-time employment by furnishing "proof" of competencies. However, there were concerns expressed. Dr. Goodwin brought up the problem of confidentiality, especially in regard to special education students. He agreed to work with the curriculum project staff to provide suggestions on dealing with special populations in the area of grading. Many members expressed concern about the "subjectivity" and "objectivity" of evaluations completed by teachers when completing a competency profile for students. Mr. Crozier had concerns about competency profiles becoming a part of students' permanent records, causing a low evaluation to be carried throughout nigh school.

The Committee was then asked to discuss major changes, trends, and problems that may have developed in the world of work since the original instructional materials were developed in 1978 and might be coming up during the next five years. Each member shared from personal observation and experience.

Mr. Crozier made an observation that it is becoming increasingly difficult now and will become more difficult in the future to teach kids anything about computers because they have computers at home. He felt that it was not technical skills dealing with computer use that was going to be needed, as much as good human relations skills. Many kids on their own would learn how to use computers, but they would need to learn more about "people" skills. He had witnessed many high-tech people that could not carry on a conversation. He also stated that it was a myth that computer science required math skills. What is required are skills in logical thinking.

Other members expressed the importance of communication skills, both verbal and written. Along with the need for teaching communication skills were the need for human relations skills or social skills. Students should be taught the basics of organizational behavior---how to get along with supervisors and other employees. In the world of work, communication and human relations skills go hand in hand with skill acquisition.

Caution was expressed in regard to teaching about "specific" computer occupations. Several points were brought out: 1) There is such a huge spectrum of computer occupations that teaching computer occupations must be approached from a broad perspective as in a career field; 2) With the rapid rate of change in the industry, computer occupations investigated by junior high students may not exist by the time they graduate; 3) Rather than approaching computers as a separate career field, a better approach would be to teach that most occupations will make use of computers; 4) Computer application needs to be emphasized instead of computer skills.

Many members expressed concerns with teaching specific occupational skills. Mr. Balboa called for input from the Committee in regard to teaching Occupational Orientation students about new and emerging occupations---how to teach students that jobs and occupations change. Mr. Prewett stated that it is difficult to teach many of the skills required for some occupations in high school or college because of the specificity of the work required. He mentioned that many industries find it necessary to have trainers to teach specialized skills.

The observation was made that many times there is a tendency to focus on dramatically changing areas and forget that there are many things that remain the same and will remain the same for some time. Mr. Prewett felt that all education is important, although some courses may not be as useful as others once an individual chooses an occupation. He perceived job change as a building process. When individuals change jobs they take what they have learned from previous jobs into new ones.

It was emphasized that we must not assume that students will remain the same. They will change and must learn to be flexible in order to change with the times. Because of that it is very important that students be taught a decision-making process. This turned the discussion to the topic of the purpose of Occupational Orientation. Dr. Kolb stated that it would be beneficial to have a stated purpose for Occupational Orientation. His perception was that Occupational Orientation's purpose was to prepare students so that they can make a better choice in the world of work. Other, more specific, purposes were discussed. Students have many false impressions and need realistic information to make decisions. They also need to learn where to go to find additional information. In Occupational Orientation, they are to get an overview of what is in the world of work and to get an idea of careers. From that they should choose something that interests them and maybe pursue something. It was cautioned that Occupational Orientation not be made too "bookish".

Occupational Orientation was described as providing students with the opportunity to make decisions about their futures. It allows them to see all things and lets them pick out what they might like regardless of their abilities. It is the beginning of a very long drawn out process of occupational choice. It is not intended to program students or lock them into a specific choice. There was an agreement that every student should be required to take Occupational Orientation to learn to make decisions based on information. However, Mr. Stewart expressed a concern that a child's natural aptitudes should not be overlooked. He felt that learning about all occupations, etc. might be overwhelming.

The meeting was concluded with a description of what the project directors would need in the future. Dr. Barnes will need them to review curriculum formating and content. Dr. Hollenback asked them to share information germane to the projects that the Committee members might acquire from professional journals, meetings, and other sources.

The meeting was adjourned at 4:15 P.M.

MINUTES

OCCUPATIONAL ORIENTATION PROJECT ADVISORY COMMITTEE

Curriculum Input Meeting

October 1, 1983
3512 Woodthrush
Denton, Texas

Mr. John Becker, Occupational Investigation Teacher, Conroe I.S.D.

Mr. Lewis Clements, Occupational Investigation Teacher, Quinlan I.S.D.

Mrs. Dona Gallagher, Occupational Investigation Teacher, Gatesville I.S.D.

Mrs. Myra Hasty, Occupational Investigation Teacher, Grand Prairie I.S.D.

Mrs. Linda Szot, Occupational Exploration Teacher, Fort Worth I.S.D.

Mr. Will Reece, Executive Director, State Advisory Committee

Mr. Azil Tipps, Occupational Investigation Teacher, Wilmer-Hutchins I.S.D.

Dr. Bill Barnes, Director, Occupational Curriculum Laboratory

Ms. Mary Hendrix, Curriculum Specialist, East Texas State University

Dr. Kathryn Hollenback, Project Co-Director, North Texas State University

---

The meeting was called to order by Dr. Kathryn Hollenback, Co-Director of the North Texas State University research project. She gave an overview of the research project and a report on the survey work that had been completed.

Copies of the Career Maturity Inventory (CMI) were disseminated, the Committee reviewed them, and they were discussed. The individual Committee members agreed to administer the CMI in a pretest/posttest design to establish a possible method of evaluating the Occupational Orientation Program statewide. All of the teachers, with one exception, had semester courses. Myra Hasty, of Grand Prairie I.S.D., will test her students immediately.

All others will pretest in January and posttest in May. The teachers requested that the data be made available to them on an individual basis to use for program evaluation and planning.

To orient the Committee on the curriculum project, Dr. Bill Barnes, Director of the Occupational Curriculum Laboratory, handed out a suggested topical outline of the content areas to be included in the Occupational Orientation curriculum. He presented a tentative format for the curriculum. The plans include covering the essential elements for Occupational Orientation as outlined in H.B. 246 and curriculum objectives established in 1980 by research completed at North Texas State University. Instructional materials to cover the essential elements and objectives will then be developed.

Sample copies of student competency profiles were distributed to Committee members. Dr. Barnes explained that two years ago the Texas Education Agency started to develop competency profiles at the four curriculum laboratories in Texas. Currently, the Occupational Curriculum Laboratories have developed competency profiles for forty-five occupations. The competency profiles are being used by vocational teachers: 1) in planning curriculum, 2) to send to prospective employers, 3) in co-op application packages, 4) as student folders for individual vocational classes, and 5) as vocational evaluation data (V.E.D.).

Dr. Barnes acknowledged that the student competency profiles already developed were for single occupations. However, he and other individuals, including Arnulfo Balboa, Program Director of Occupational Orientation, feel that an adaptation of the more diversified Occupational Orientation curriculum was possible. Instead of listing individual occupational work tasks, the student competency profile for Occupational Orientation would list the specific objectives of the program (previously referred to as enabling objectives).

In reference to the existing instructional materials, Dr. Barnes reported that ten to twenty percent would remain the same. To ascertain the needed changes in the instructional material, the Occupational Curriculum Lab is surveying all Occupational Orientation teachers in the State to gain their input and gather instructional materials developed by individual teachers for their own programs.

Mary Hendrix, Curriculum Specialist, described the procedures used to develop a tentative topical outline of Occupational Orientation subject matter. She developed the tentative outline from her research, the suggested essential elements in H.B. 246 and her experience as an Occupational Investigation teacher. When the final topical outline is established, units of instruction will be developed. The units will contain specific objectives or activities that would lead to the attainment of the unit objectives.

Mary Hendrix then handed out a sample format of the curriculum unit for the teachers to review. The format consisted of: 1) unit objectives and specific objectives, 2) notes to the instructor, 3) information sheets, 4) activity sheets, and 5) unit tests. She explained that an attempt will be made to provide activities on different levels within each unit. Some activities will require less reading, writing, and abstract thinking for use with special populations, while others will be more advanced and in-depth for use by those students who are higher achievers.

Will Reece, Executive Director of the Advisory Council for Technical-Vocational Education in Texas, asked the Committee for their input. He posed questions to the group that had implications for the immediate future of Occupational Orientation. He asked about the emphasis given to the instructional areas other than the fifteen clusters. As he (not the Advisory Council) personally perceives it, Occupational Orientation is a class offered at the middle school to encourage kids to look at the myriad of occupations which exist and begin to identify their interests and abilities to match with occupations.

John Becker, Conroe ISD, described his Occupational Investigation program. It is offered to students in grades nine through ten. (1978 program standards for Occupational Orientation included Occupational Investigation as a secondary school elective.) Because his program differs from the majority of Occupational Orientation programs, the existing instructional materials and many of the activities are too elementary. Many of his students have jobs and have mastered much of the socio-economic activities.

Azil Tipps, Wilmer-Hutchins ISD Occupational Investigation teacher, suggested that when making a determinate of the appropriate grade level, theories from developmental psychology and occupational choice should be taken into consideration. Another suggestion was made in reference to the H.B. 246 essential elements. If changes were to be made and the content of Occupational Orientation changed, a decision to grade placement should be made after the course content was established.

Many teachers commented about the evolution of the curriculum of Occupational Orientation. They defended teaching the socio-economic area for several reasons: 1) Many students are not waiting until graduation to get jobs. They are obtaining part-time jobs while in high school. 2) Occupational Orientation already covers citizenship, consumer education, free enterprise and basic skills necessary to gain employment taught by qualified teachers. 3) Often times vocational co-op students who did not take Occupational Orientation are introduced to job acquisition skills after they have obtained their jobs.

In evaluating the course content it was pointed out that all areas are not necessarily treated equally. Some areas that require maturity to have value are only introduced to familiarize students. Others, more appropriate to their developmental and intellectual levels, are stressed. Everyone agreed that a major emphasis in the curriculum should be to prepare students for occupational and skill change as they mature. More "predictive" occupational literature identifying job needs in the future was mentioned as a need.

Although Occupational Investigation and Occupational Exploration would compliment the "tracking" system currently being discussed at the State level, the Committee was not in favor of the proposal. Concerns expressed were: 1) "labeling" students at an early age, 2) vocational education becoming an area to place under-achieving students, and 3) lack of flexibility in curriculum. The conclusion was reached by the Committee that a more democratic or "natural" tracking could take place if all students could have some idea of where they were going in the future and be able to plan high school schedules accordingly. Being able to formulate goals and objectives as covered in "Educational Planning and Decision Making" helps students gain a more realistic picture of occupational selection and education/training requirements. Furthermore, academic basics need to be adapted to students' needs. For example, instead of an advanced general English class, technical English could be offered to students whose aptitudes and interests were in that area.

The Committee recommended strongly that Occupational Orientation be required for every student. This would enable students to become much more self-directed to protect them from being lost in the scheduling process. The students would be able to talk intelligently to counselors and be able to express their preferences. Counselors would also have much more opportunity for group counseling such as high school orientation, testing, etc. without having to rush through such tasks in academic classes. Under no circumstances did the Committee feel that students be locked into a single occupational or educational decision. However, the consensus was that Occupational Orientation program completers would be aware of the options available to them and would have a better understanding of how various types of high school classes would affect their futures. They would know what was going to be required of them.

The meeting was adjourned at 12:30 P.M.

APPENDIX B

QUESTIONNAIRES

- Occupational Orientation Curriculum Questionnaire 1983
- Occupational Orientation Teacher-Education Certification Questionnaire 1983
- Cover Letter for the Evaluation of Occupational Orientation Programs Survey
- Occupational Orientation Confidential Survey
- Occupational Exploration Information Survey
- Occupational Investigation Information Survey

O.O. TEACHER-EDUCATION
CERTIFICATION QUESTIONNAIRE 1983

O.O. ASSESSMENT PROJECT

North Texas State University   Denton, Texas 76203

NAME ______________________ SOCIAL SECURITY NUMBER ______________

HOME ADDRESS ______________ TELEPHONE NUMBER (   ) ______________

______________________________ ZIP __________

SCHOOL ____________________ DISTRICT ________________________

SCHOOL ADDRESS ____________ TELEPHONE NUMBER (   ) ______________

______________________________ __________

HOW MANY YEARS HAVE YOU TAUGHT OCCUPATIONAL ORIENTATION? __________

VOCATIONAL DIRECTOR ______________________________

VOCATIONAL COUNSELOR ______________________________

Please place an X in the appropriate box.

OCCUPATIONAL INVESTIGATION TEACHER	☐	CERTIFIED	☐
OCCUPATIONAL EXPLORATION TEACHER	☐	NOT CERTIFIED	☐

---

1. Has your district completed any research, follow-up, or evaluations of occupational orientation?	YES	NO
2. Are the results available?	YES	NO
3. Have you completed any research, follow-up, or evaluations of your occupational orientation classes?	YES	NO
4. Are the results available?	YES	NO
5. Do you have access to computers for teaching your occupational orientation classes?	YES	NO

IF YOU ANSWERED YES, PLEASE ANSWER THE FOLLOWING:

Are you using it/them to teach occupational orientation?	YES	NO
Do you have enough software?	YES	NO

What brand/brands are you using? ______________________________

____

Where did you receive your computer training? ______________________________

____

DIRECTIONS: This survey requires you to make TWO responses for each item listed. On the LEFT side of the item, place a check in the box under the response that describes the quantity of the item you have available to teach occupational orientation. On the RIGHT side of the item, place a check in the box under the response that describes how important the item is in teaching occupational orientation.

QUANTITY

How much of the following do you have to teach occupational orientation?

IMPORTANCE

How important are the following items to teaching occupational orientation?

CLASSROOM MANAGEMENT

A LARGE AMOUNT	A SUFFICIENT AMOUNT	SOME	SMALL AMOUNT	NONE		EXTREMELY IMPORTANT	IMPORTANT	SOME IMPORTANCE	LITTLE IMPORTANCE	NO IMPORTANCE
					SUGGESTED FLOOR PLANS FOR CLASSROOM ORGANIZATION					
					SUGGESTED EQUIPMENT FOR THE CLASSROOM					
					MATERIALS TO INCREASE THE EFFECTIVE USE OF ADVISORY COMMITTEES					
					BULLETIN BOARD IDEAS					
					INFORMATION ON EQUAL ACCESS TO ALL PROGRAM AREAS					
					INFORMATION OF TEACHING THE HANDICAPPED AND DISADVANTAGED					
					INFORMATION ON TEACHING LIMITED ENGLISH PROFICIENCY STUDENTS					
					METHODS FOR MAINTAINING CLASSROOM DISCIPLINE					
					INSTRUCTIONAL STRATEGIES					

INSTRUCTIONAL MATERIALS

					TEXTBOOKS					
					WORKBOOKS					
					WORKSHEETS					
					TRANSPARENCIES					
					REFERENCE MATERIALS					
					EDUCATIONAL GAMES					
					COMPUTER APPLICATIONS FOR USE IN OCCUPATIONAL ORIENTATION					
					SLIDE/TAPE PRESENTATIONS					
					FILMSTRIPS					

REFERENCES FOR WRITING CURRICULUM

					DESCRIPTION OF GENERAL TOPICS THAT SHOULD BE TAUGHT IN THE OCCUPATIONAL ORIENTATION CLASS					
					IDENTIFIED COMPETENCIES IN THE SUBJECT MATTER FOR STUDENTS TO LEARN					
					INSTRUCTIONAL OUTLINES LISTING SPECIFIC STUDENT LEARNER OUTCOMES					
					CURRICULUM OUTLINES LISTING MEASURABLE BEHAVIORAL OBJECTIVES					
					COMPLETE CURRICULA LISTING STUDENT LEARNER OUTCOMES, TEACHING METHODS AND RESOURCES					
					COMPLETE INSTRUCTIONAL MODULES FOR INDIVIDUAL EXPLORATION EXPERIENCES					
					PRE/POST TESTS TO MEASURE ATTAINMENT OF IDENTIFIED STUDENT LEARNER OUTCOMES					

DIRECTIONS: Please answer each of the following questions concerning the usefulness of the required certification courses necessary to become an Occupational Orientation teacher.

Please place an "X" in the appropriate space to indicate your answer to each question.

1. At which university did you complete the required certification courses?

REQUIRED CERTIFICATION COURSES	PLANNING AND ORGANIZING PROGRAMS OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. East Texas State University					
2. Sam Houston State University					
3. Prairie View A & M University					
4. Texas A & M University					
5. North Texas State University					
6. Southwest Texas State University					
7. University of Houston					
8. Other Institutions (List)________________					

2. To what extent has each course been useful to you in the area of planning and organizing your classes

	PLANNING AND ORGANIZING PROGRAMS OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

3. To what extent has each course been useful to you in the day-to-day operation of your classes

	PLANNING AND ORGANIZING PROGRAMS OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

4. To what extent was the textbook for each course relevant?

	PLANNING AND ORGANIZING PROGRAMS OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

REQUIRED CERTIFICATION COURSES

5. To what extent was the course content of these courses relevant to your professional needs?

	PLANNING AND ORGANIZING PROGRA OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

6. To what extent was the course content of these courses well organized?

	PLANNING AND ORGANIZING PROGRA OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

7. To what extent were the objectives of each course made clear?

	PLANNING AND ORGANIZING PROGRA OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

8. To what extent was the course content of each course current?

	PLANNING AND ORGANIZING PROGRA OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

9. To what extent were the instructional materials and/or resources of each course appropriate?

	PLANNING AND ORGANIZING PROGRA OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. A great deal					
2. An average amount					
3. Very little					
4. Little or none					
5. Does not apply					

10. How would you rate the value of this course in relation to the other certification courses that you have completed?

	PLANNING AND ORGANIZING PROGRA OF VOCATIONAL GUIDANCE	OCCUPATIONAL AND VOCATIONAL EDUCATION INFORMATION	HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION	METHODS AND MEDIA FOR TEACHING VOCATIONAL-TECHNICAL SUBJECTS	ORGANIZATION AND MANAGEMENT OF VOCATIONAL-TECHNICAL LABORATORY SHOP PROGRAMS
1. Excellent					
2. Above average					
3. Average					
4. Below average					
5. Poor					
6. Does not apply					

What problems, if any, have you encountered during the process of becoming a certified Occupational Orientation teacher? Please check all those that apply.

11. Conflicts in scheduling of required courses.
(51)______Yes ______No ______Is not a problem

12. Lack of information regarding certification requirements.
(52)______Yes ______No ______Is not a problem

13. Lack of adequate housing during summer school sessions.
(53)______Yes ______No ______Is not a problem

14. Problems concerning admission requirements to universities where certification courses are offered.
(54)______Yes ______No ______Is not a problem

15. Required courses offered at institutions that are not convenient to teachers.
(55)______Yes ______No ______Is not a problem

16. Other (Please specify)____

____

What changes, if any, would you make in the process currently used to certify Occupational Orientation teachers? Please check all those that apply.

17. ______(56) Developing information packets to provide knowledge of admission requirements to various universities.

18. ______(57) Developing information packets regarding the required certification courses and the certification process.

19. ______(58) Offering required courses at times that are convenient to teachers.

20. ______(59) Offering the required courses at centralized locations.

21. ______(60) Other (Please Specify)____________________________________

____

What roles should the teacher educators play in the teacher training and certification process? Please check all those that apply.

22.______(61) Provide on-site technical assistance to teachers.

23.______(62) Provide consultation services to classroom teachers.

24.______(63) Provide both pre and in-service training to teachers.

25.______(64) Provide assistance in locating employment.

26.______(65) Provide assistance with academic problems (degree plans, etc.)

27.______(66) Provide information and/or assistance regarding resource persons.

28.______(67) Other (Please specify)____________________________________

____

____

(68) 29. Please check one of the following:
1. ( ) Male
2 ( ) Female

(69) 30. Please check one of the following:
1 ( ) American Indian
2 ( ) Hispanic
3 ( ) Black
4 ( ) White
5 ( ) Asian

(70) 31. For what length of time has the Occupational Orientation program been in existence in your school district? Please check one of the following:
1 ( ) Less than one year
2 ( ) One to two years
3 ( ) Three to five years
4 ( ) Six to seven years
5 ( ) Seven to nine years
6 ( ) Ten or more years

(71) 32. Which one of the following statements best describes your present position?
1 ( ) Full-time Occupational Investigation Teacher (Full Unit)
2 ( ) Part-time Occupational Investigation Teacher (Half Unit)
3 ( ) Full-time Occupational Exploration Teacher (Full Unit)
4 ( ) Part-time Occupational Exploration Teacher (Half Unit)
5 ( ) Other (Please specify)______________________________
____
____
____

(72) 33. How many years have you been teaching Occupational Orientation? Please check one of the following.
1 ( ) Less than one year
2 ( ) One to three years
3 ( ) Four to six years
4 ( ) Seven to nine years
5 ( ) Ten or more years

(73) 34. Do you think that there is a need for additional courses to prepare Occupational Orientation teachers?
1 ( ) Yes
2 ( ) No

If you have completed all certification courses go to page 8.

If you have completed some certification courses go to page 7.

FOR TEACHERS WHO HAVE NOT COMPLETED ALL CERTIFICATION COURSES

If you have completed one or more certification courses, please answer the following questions.

1. Check the certification courses that you have completed.

_____None

_____History and Principles of Vocational Education

_____Methods and Media for Teaching Vocational Subjects

_____Occupational and Vocational Education Information (O.I. Only)

_____Planning and Organizing Programs of Vocational Guidance

_____Organization and Management of Vocational Laboratory Programs (O.E. Only)

2. What competencies needed to teach occupational orientation were not taught in the courses that you completed?

____

____

____

3. If the content of occupational orientation teacher certification courses were to be changed, what suggestions would you offer? What changes should be made?

____

____

____

4. What areas of instruction did you receive in your certification courses that proved to be of little value?

____

____

____

5. What areas of instruction did you receive in your certification courses that proved to be of great value?

____

____

____

FOR TEACHERS WHO HAVE COMPLETED ALL CERTIFICATION COURSES

1. How many years has it been since you completed your certification course work? (Not degree) ________

2. Rank the following certification courses in order of importance for preparing you to teach occupational orientation. Use (1) for most valuable and (4) for least important. Use each number once.

____Methods and Media for Teaching Vocational Subjects
____Occupational and Vocational Education Information (O.I. Only)
____Planning and Organizing Programs of Vocational Guidance
____History and Principles of Vocational Education
____Organization and Management of Vocational Laboratory Programs (O.E.Only)

3. How much specific instruction related to occupational orientation did you receive from your certification courses in the following topics?

	Much		Some		None
Curriculum (What should be taught)	5	4	3	2	1
Instructional activities	5	4	3	2	1
Methods of instruction	5	4	3	2	1
Adolescent development	5	4	3	2	1
Learning theory	5	4	3	2	1
Philosophy of vocational education	5	4	3	2	1
Methods of classroom organization	5	4	3	2	1
Using advisory committee	5	4	3	2	1

4. What competencies needed to teach occupational orientation were not taught in your certification courses?

5. What areas of instruction did you receive in your certification courses that proved to be of little value?

____

____

____

____

____

6. What areas of instruction did you receive in your certification courses that proved to be of great value?

____

____

____

____

____

7. If the content of occupational orientation teacher certification courses were to be changed, what suggestions would you offer? What changes should be made?

____

____

____

____

____

____

8. Please identify any new competencies that you feel are needed to teach occupational orientation?

____

____

____

____

____

O.O. CURRICULUM QUESTIONNAIRE 1983

O.O. ASSESSMENT PROJECT

North Texas State University   Denton, Texas 76203

NAME ______________________ SOCIAL SECURITY NUMBER ____________

HOME ADDRESS ______________________ TELEPHONE NUMBER (   ) ____________

______________________________ ZIP ________

SCHOOL ______________________ DISTRICT ____________

SCHOOL ADDRESS ______________________ TELEPHONE NUMBER (   ) ____________

______________________________ ZIP ________

HOW MANY YEARS HAVE YOU TAUGHT OCCUPATIONAL ORIENTATION? ____________

VOCATIONAL DIRECTOR ______________________

VOCATIONAL COUNSELOR ______________________

Please place an X in the appropriate box.

OCCUPATIONAL INVESTIGATION TEACHER	☐	CERTIFIED	☐
OCCUPATIONAL EXPLORATION TEACHER	☐	NOT CERTIFIED	☐

Please circle the correct response.

1. Are you aware of the four instructional modules developed for Occupational Orientation by East Texas State University Occupational Curriculum Laboratory?	YES	NO
IF YES, ANSWER THE NEXT QUESTIONS. ▽ IF NO, GO TO #4.		
2. Do you use the modules in your classes?	YES	NO
3. Do the modules meet your classroom instructional needs?	YES	NO
➜ 4. Are you aware of the curriculum outline with validated objectives developed for Occupational Orientation by North Texas State University?	YES	NO
IF YES, ANSWER THE NEXT QUESTIONS. ▽ IF NO, GO TO NEXT PAGE.		
5. Do you use the curriculum outline?	YES	NO
6. Does it meet your needs?	YES	NO

INSTRUCTIONAL AREA

SELF APPRAISAL

To make meaningful occupational decisions, and to develop a positive self concept, students must learn about themselves and their uniqueness.

Please rank the following objectives from the most important to the least important by using the numbers 1, 2, 3 and 4. Use each number once.
1 = Most Important 4 = Least Important

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

RANK

- Complete the steps necessary in conducting a self appraisal. ______ 13
- Demonstrate a positive attitude toward themselves and others. ______ 14
- Understand the importance of doing well on tests. ______ 15
- Understand that people change their careers throughout life. ______ 16

Please rate the following objectives by circling the number next to the objective which reflects your opinion. Rate the objectives according to how important they are to be taught in the occupational investigation classroom.

3 Must be taught
2 Should be taught
1 No need to teach
0 No opinion

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

	CIRCLE				
1. Identify their own values.	3	2	1	0	17
2. Identify their own abilities.	3	2	1	0	18
3. Identify their own interests.	3	2	1	0	19
4. Identify their own aptitudes.	3	2	1	0	20
5. Identify their personal assets (strong points).	3	2	1	0	21
6. Identify their liabilities (weak points).	3	2	1	0	22
7. Understand that their self concepts influence their ability to succeed.	3	2	1	0	23
8 Describe themselves as unique individuals.	3	2	1	0	24

9. Identify traits which are important to having a pleasing personality.	3	2	1	0	25
10. Demonstrate the knowledge that they have the ability to change themselves if they so desire.	3	2	1	0	26
11. Describe the advantages and disadvantages of being a leader and/or a follower.	3	2	1	0	27
12. Describe how attitudes based on prejudice affect the behavior of other individuals.	3	2	1	0	28
13. Show cooperation and consideration for fellow students.	3	2	1	0	29
14. Work together with others.	3	2	1	0	30
15. Describe "good" manners both on the job an in social relationships.	3	2	1	0	31
16. Describe how different types of tests such as interest, aptitude and achievement tests can help select occupations.	3	2	1	0	32
17. Explain why employers administer tests to persons applying for a job.	3	2	1	0	33
18. Identify ways to improve test scores.	3	2	1	0	34
19. Compare their salable skills to those required in the job market.	3	2	1	0	35
20. Identify different motives for working and choosing various types of employment.	3	2	1	0	36

INSTRUCTIONAL AREA

EDUCATIONAL PLANNING AND DECISION MAKING

Students must be able to make decisions, plans and set up goals for the future on a personal and vocational level. Knowledge of educational planning and decision making provides students with the opportunity to gain these skills plus information about education/training opportunities.

Please rank the following objectives from the most important to the least important by using the numbers 1, 2, 3, 4 and 5. Use each number once.

1 = Most Important ***5 = Least Important***

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

	RANK
• Complete a tentative high school schedule that meets the local school district's requirements for graduation.	______ 37
• Evaluate their present performance in school and relate it to their future plans for education/training.	______ 38
• Describe the education/training possibilities available to them after leaving high school.	______ 39
• Use a logical decision-making process to solve personal and career problems.	______ 40
• Use goals to achieve personal and professional success.	______ 41

Please rate the following objectives by circling the number next to the objective which reflects your opinion. Rate the objectives according to how important they are to be taught in the occupational investigation classroom.

3	***Must be taught***	***1***	***No need to teach***
2	***Should be taught***	***0***	***No opinion***

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

	CIRCLE				
21. Identify the requirements for high school graduation in their district.	3	2	1	0	42
22. Describe which electives will help them in preparing for particular occupations.	3	2	1	0	43
23. Describe the academic and general education programs available to them at the high school level.	3	2	1	0	44
24. Describe the vocational programs available to them at the high school level.	3	2	1	0	45
25. Relate various scholastic grade averages to requirements of education/training institutions.	3	2	1	0	46
26. Compare the similarities between school and work, realizing that their present occupation is student.	3	2	1	0	47
27. Evaluate how much education/training they are willing to pursue in relationship to the requirements of the occupations in which they are interested.	3	2	1	0	48
28. Identify the types of education/training which would help them achieve a career goal.	3	2	1	0	49
29 Describe education/training methods which are alternatives to college.	3	2	1	0	50

30. Explain why a worker with more education/training and experience will qualify for a higher level occupation within a career field.	3	2	1	0	51
31. Develop an education/training plan that fits occupations of their choice.	3	2	1	0	52
32. Describe sources of education/training information.	3	2	1	0	53
33. Identify sources of financing for continued education/training.	3	2	1	0	54
34. Identify examples of logical and emotional decisions.	3	2	1	0	55
35. Apply decision-making steps to make occupational choices.	3	2	1	0	56
36. Apply decision-making steps to solve personal problems.	3	2	1	0	57
37. Define the term "goal".	3	2	1	0	58
38. Understand that personal goals should be matched to career choices for a happier life.	3	2	1	0	59
39. Differentiate between short, medium and long range goals.	3	2	1	0	60
40. Differentiate between needs and wants.	3	2	1	0	61
41. Complete a tentative career plan.	3	2	1	0	62

☐1
80

INSTRUCTIONAL AREA

☐☐☐
1 2 3

SOCIO-ECONOMIC FACTORS

To lead productive lives, students must master the basic skills necessary to take their places in our society as citizens and workers. Hence, the need for "socio" or social skills and "economic" or financial skills.

Please rank the following objectives from the most important to the least important, using the numbers 1, 2, 3, 4, 5 and 6. Use each number once.

1 = ***Most Important*** 6 = ***Least Important***

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

RANK

- Use the telephone correctly. ____ 6

- Give and receive instructions. ______ 7
- Describe the unique environmental, social and economic factors of their community and surrounding area. ______ 8
- Describe those things that contribute to being successful on the job. ______ 9
- Identify the factors that determine lifestyle. ______ 10
- Understand the role of unions and professional organizations. ______ 11

Please rate the following objectives by circling the number next to the objective which reflects your opinion. Rate the objectives according to how important they are to be taught in the occupational investigation classroom.

3 Must be taught ***1 No need to teach***

2 Should be taught ***0 No opinion***

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

	CIRCLE				
42. Demonstrate the ability to complete formal calls to strangers.	3	2	1	0	12
43. Place a long distance phone call.	3	2	1	0	13
44. Arrange for a job interview by phone.	3	2	1	0	14
45. Demonstrate the ability to answer the phone properly.	3	2	1	0	15
46. Understand the need to talk on some occasions and the need to listen in other situations.	3	2	1	0	16
47. Demonstrate good listening skills.	3	2	1	0	17
48. Demonstrate the ability to follow directions.	3	2	1	0	18
49. Understand the need for good grammar and spelling in order to communicate with others.	3	2	1	0	19
50. Identify various civic organizations and describe how they contribute to improving their communities.	3	2	1	0	20
51. Determine the labor demands of their community.	3	2	1	0	21
52. Determine qualities contributing to employability.	3	2	1	0	22

53. Display pride in their work.	3	2	1	0	
54. Understand the importance of being consistent and persistent.	3	2	1	0	
55. Accept personal responsibility.	3	2	1	0	25
56. Properly care for and use equipment and materials.	3	2	1	0	26
57. Describe the concept of quality in relationship to a task or job.	3	2	1	0	27
58. Understand the importance of staying with a task until it is completed.	3	2	1	0	28
59. Describe how workers receive job promotions.	3	2	1	0	29
60. Identify good grooming habits.	3	2	1	0	30
61. Describe the merit of good grooming.	3	2	1	0	31
62. Understand that employees work together to reach the common goals of a company.	3	2	1	0	32
63. Describe the importance of being loyal to an employer.	3	2	1	0	33
64. Understand that employers need to be loyal to their employees.	3	2	1	0	
65. Understand the consequences of not working.	3	2	1	0	35
66. Identify the causes of failure on the job.	3	2	1	0	36
67. Explain proper procedures to use in resigning from a job.	3	2	1	0	37
68. Understand that all work has dignity.	3	2	1	0	38
69. Relate a described lifestyle to occupations that would make that lifestyle possible.	3	2	1	0	39
70. Relate how much it costs to maintain a certain standard of living.	3	2	1	0	40
71. Describe apprenticeship.	3	2	1	0	41
72. Explain the purposes of professional organizations and unions.	3	2	1	0	[illegible]
73. Identify the advantages and disadvantages of membership in unions and professional organizations.	3	2	1	0	41

☐☐☐
1 2 3

Please rank the following objectives from the most important to the least important, using the numbers 1, 2, 3, 4, 5 and 6. Use each number once.

1 = Most Important ***6 = Least Important***

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

	RANK
• Develop a basic understanding of the economy.	_____ 6
• Perform government regulated work tasks, such as applying for a social security card.	_____ 7
• Demonstrate the skills necessary to practice personal money management.	_____ 8
• Demonstrate the ability to use identified methods of finding employment.	_____ 9
• Demonstrate job acquisition skills.	_____ 10
• Demonstrate a knowledge of how employees are paid.	_____ 11

Please rate the following objectives by circling the number next to the objective which reflects your opinion. Rate the objectives according to how important they are to be taught in the occupational investigation classroom.

3 Must be taught ***1 No need to teach***

2 Should be taught ***0 No opinion***

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, STUDENTS WILL BE ABLE TO:

		CIRCLE				
74.	Identify the characteristics of a free enterprise economy.	3	2	1	0	12
75.	Describe how work, occupations, goods and services are related to each other.	3	2	1	0	13
76.	Relate cost of living to inflation.	3	2	1	0	14
77	Define inflation.	3	2	1	0	15
78.	Realize that changes in technology will affect their work and make it necessary to retrain.	3	2	1	0	16

79.	Describe the difference between producing goods and producing services.	3	2	1	0	17
80.	Fill out an income tax W-4 form. (withholding statement)	3	2	1	0	18
81.	Complete a request form for a social security card.	3	2	1	0	19
82.	Explain benefits received from social security.	3	2	1	0	20
83.	Apply for an income tax refund.	3	2	1	0	21
84.	Describe child labor laws which regulate their ability to work.	3	2	1	0	22
85.	Identify jobs legally available to them presently.	3	2	1	0	23
86.	Describe the purpose and application of equal employment opportunity.	3	2	1	0	24
87.	Demonstrate a realistic knowledge of the value of money and what it brings.	3	2	1	0	25
88.	Demonstrate the ability to plan a budget.	3	2	1	0	26
89.	Demonstrate skills necassary for maintaining a savings account.	3	2	1	0	27
90.	Demonstrate skills necessary for maintaining a checking account.	3	2	1	0	28
91.	Describe how credit works.	3	2	1	0	
92.	Identify different types of financial interest.	3	2	1	0	30
93.	Write a letter using a standard business letter form.	3	2	1	0	31
94.	Write a letter requesting a job application.	3	2	1	0	32
95.	Understand and use the classified ad section.	3	2	1	0	33
96.	Read classified ad abbreviations.	3	2	1	0	34
97.	Use resources provided by the Texas Employment Commission.	3	2	1	0	35
98.	Describe the differences and similarities between private and public employment agencies.	3	2	1	0	36
99.	Explain how private employment agencies find occupations for individuals.	3	2	1	0	37
100.	Identify people to contact when looking for employment.	3	2	1	0	38
101.	Correctly fill out job application forms.	3	2	1	0	
102.	Participate in a job interview.	3	2	1	0	40

103. Compose a personal resume.	3	2	1	0	41
104. Describe different types of pay.	3	2	1	0	42
105. Describe on-the-job worker benefits.	3	2	1	0	43
106. Differentiate between gross and net pay.	3	2	1	0	44
107. Differentiate between voluntary and involuntary deductions.	3	2	1	0	45
108. Compute payroll deductions.	3	2	1	0	46
109. Understand the necessity of time clocks and how they are used.	3	2	1	0	47

INSTRUCTIONAL AREA

FIFTEEN CLUSTERS

A general knowledge of the fifteen clusters is a requisite to assisting students in the discovery of their vocational interests. The career clusters are simply a classification system of occupations used for guidance purposes. The clusters should serve as a vehicle to identify those occupations which personally interest students.

Please rank the following objectives from the most important to the least important by using the numbers 1, 2, 3, 4 and 5. Use each number once.

1 = Most Important 5 = Least Important

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

	RANK
• Use the cluster classification system to locate occupations for investigation.	____ 48
• Analyze occupations which are of personal interest to them.	____ 49
• Demonstrate the ability to obtain information about occupations.	____ 50
• Locate occupations to survey by choosing one or more clusters for further exploration.	____ 51
• Classify occupations into the correct cluster.	____ 52

Please rate the following objectives by circling the number next to the objective which reflects your opinion. Rate the objectives according to how important they are to be taught in the occupational investigation classroom.

3 Must be taught ***1 No need to teach***

2 Should be taught ***0 No opinion***

AFTER COMPLETING INSTRUCTIONAL ACTIVITIES, THE STUDENTS WILL BE ABLE TO:

		CIRCLE			
110. Explain the reasons for grouping occupations into clusters.	3	2	1	0	53
111. Demonstrate a general knowledge of each cluster.	3	2	1	0	54
112. Recite and spell cluster titles.	3	2	1	0	55
113. Explain the cluster classification of cluster, family, occupation, job and work.	3	2	1	0	56
114. Define each cluster.	3	2	1	0	
115. List several occupations for each cluster.	3	2	1	0	58
116. Make tentative career decisions by listing those clusters which would fit the career life style the student desires.	3	2	1	0	59
117. Describe how geographical location affects the occupations they choose to investigate.	3	2	1	0	60
118. Describe the work involved in the occupations they choose to investigate.	3	2	1	0	61
119. Describe the working conditions involved for the occupations they choose to investigate.	3	2	1	0	62
120. Determine the abilities and personality required for the occupations they choose to investigate.	3	2	1	0	63
121. Compare their personal characteristics to those required by occupations they choose to investigate.	3	2	1	0	
122. Identify the earnings received in the occupations they choose to investigate.	3	2	1	0	65

123.	Identify the education/training required by occupations they choose to investigate.	3	2	1	0	66
124.	Identify the experience needed for the occupations they choose to investigate.	3	2	1	0	67
125.	Identify the supply and demand for the occupations they choose to investigate.	3	2	1	0	68
126.	Identify the opportunities for advancement in the occupations they choose to investigate.	3	2	1	0	69
127.	Identify alternate occupations which require the same skills as the occupations they choose to investigate.	3	2	1	0	70
128.	Describe the advantages and disadvantages of the occupations they choose to investigate.	3	2	1	0	71
129.	Use *The Dictionary of Occupational Titles* to locate occupational information.	3	2	1	0	72
130.	Use *The Occupational Outlook Handbook* to locate occupational information.	3	2	1	0	73
131.	Identify private and professional people and their roles in furnishing occupational information.	3	2	1	0	74
132.	Explain the types of occupational information furnished by identified government agencies.	3	2	1	0	75
133.	Explain the types of occupational information furnished by identified private agencies.	3	2	1	0	76

3
80

Texas Education Agency

- STATE BOARD OF EDUCATION
- STATE COMMISSIONER OF EDUCATION
- STATE DEPARTMENT OF EDUCATION

201 East Eleventh Street
Austin, Texas
78701

January 16, 1984

Dear Vocational Administrator:

Dr. Kathryn Hollenback, North Texas State University, under contract to the Texas Education Agency, is conducting an evaluation of occupational orientation programs. Please take a few minutes to complete the enclosed questionnaires. The purposes of the questionnaires are to provide important information needed to develop new curriculum/instructional materials for occupational orientation and to increase the effectiveness of preservice and inservice training for occupational orientation teachers. It is imperative we receive a 100 percent return in order to gain a complete picture of the present scope and sequence for all occupational orientation programs in the state.

The colored questionnaires are to obtain demographic data that would provide a description of how the occupational orientation program is offered in your district. The white questionnaire is to solicit your perceptions of the occupational orientation program. It is to be completely confidential and under no circumstances will an attempt be made to identify the school district or individual respondent.

If you feel that another professional on your staff could better fill out the questionnaires, please feel free to forward them to him/her. However, please see that the questionnaires are returned promptly in the postage-paid envelope enclosed.

Your attention to this matter is greatly appreciated. The results of this survey will benefit students, teachers, and administrators by strengthening and improving the delivery of occupational orientation.

Sincerely,

Paul W. Lindsey

Paul W. Lindsey, Associate Commissioner
for Occupational Education and Technology

PWL:PAM:dkk
Enclosures

"An Equal Opportunity Employer"

OCCUPATIONAL ORIENTATION PROGRAM SURVEY

The following questionnaire is intended to solicit your perceptions and will not be considered as an evaluation of the district's Occupational Orientation Program. The information you provide will remain confidential. After the questionnaire has been completed, place it in the enclosed, unmarked envelope. Upon receipt, it will be separated from the other survey instruments. No attempt will be made to identify the school district, you, or the individual you chose to have complete it.

PLEASE PLACE A CHECK IN THE SPACE THAT BEST REPRESENTS YOUR PERCEPTIONS.

1. How clear are the Texas Education Agency's Program Objectives for Occupational Orientation?

   Very Clear ______ ______ ______ ______ ______ Not Clear

2. How effective is the Occupational Orientation Program in meeting the occupational information needs of all types of students?

   Very Effective ______ ______ ______ ______ ______ Not Effective

3. How strong is your Occupational Orientation Program?

   Very Strong ______ ______ ______ ______ ______ Weak

4. To what degree is Occupational Orientation being used to increase non-traditional enrollment in vocational education classes?

   A Great Deal ______ ______ ______ ______ ______ Not At All

5. How much are high school counselors involved in the Occupational Orientation Program?

   A Great Deal ______ ______ ______ ______ ______ Not At All

6. How well is the Occupational Orientation Program understood by the academic teachers?

   Very Well ______ ______ ______ ______ ______ Not At All

7. Is the Occupational Orientation Program used as a "dumping ground" to place students who are not succeeding in other classes?

   Very Often ______ ______ ______ ______ ______ Never

8. How well are the teachers in the Occupational Orientation Program trained?

   Very Well ______ ______ ______ ______ ______ Poorly

OVER

1. What problems are you aware of that the Occupational Orientation Teachers have in teaching classes?

____

____

____

____

2. What problems are you aware of that the Occupational Orientation Teachers have in getting certified?

____

____

____

____

3. What problems are you aware of in the administration of the Occupational Orientation Program?

____

____

____

____

4. Please make any recommendations or comments for improving the delivery of Occupational Orientation to the students in your district.

____

____

____

____

TITLE OF PERSON COMPLETING THE QUESTIONNAIRE:

____Teacher ____Regular Counselor ____Superintendent ____Principal

____Vocational Director ____Vocational Supervisor ____Vocational Counselor

____Other(Describe)______________________________________

OCCUPATIONAL EXPLORATION INFORMATION SURVEY

Prepared by ____________________ Title ____________________ Date __________

School District ____________________ City ____________________

Information gathered from this instrument will be used to develop curriculum for Occupational Exploration and teacher-education inservice programs. Please answer as correctly and specifically as possible.

1. How many unit(s) of Occupational Exploration does/do the district have operating for the 1983-84 school year? __________
2. How many of the Occupational Exploration Teachers have previous experience teaching Occupational Exploration? __________
3. How many of the Occupational Exploration Teachers are teaching Occupational Exploration for the first time this year? __________
4. Do the responses from questions two and three equal the answer for question one? If not, please explain the discrepancy.

   ____

   ____
5. How many minutes in length is an Occupational Exploration class? __________
6. What is the total number of periods a day in the school(s) having Occupational Exploration? __________
7. How many weeks in length is/are the Occupational Exploration course of study? __________
8. Approximately how much money is budgeted for Occupational Exploration instructional supplies per unit? __________
9. What is the average number of students in an Occupational Exploration class? __________
10. Approximately how many students will complete Occupational Exploration for the entire 1983-84 school year? __________
11. Prioritize the list of special student populations based on the percentage taking Occupational Exploration. (Use number 1 for the largest percentage and 5 for the smallest. If a population is not served, enter 0.

    ____ High Academic

    ____ Disadvantaged

    ____ Special Education

    ____ Limited English Proficiency

    ____ Handicapped

OVER

12. What is/are the type(s) of Occupational Exploration unit(s)? (Regular or V.E.H.) ____________

13. Can students who have successfully completed Occupational Exploration repeat the class? ____________

IF YES: How are they scheduled? In a separate class, with first year students, etc.

____

____

How many times can they repeat?

____

14. Has the district completed any type of evaluation, follow-up or research on the effectiveness of Occupational Exploration? ____________

15. Circle the grade or grades of students enrolled in Occupational Exploration.

Ninth
Tenth
Eleventh
Twelfth
Other

16. What cluster(s) are covered by your Occupational Exploration unit(s).

______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________
______________________ ______________________

17. What do you perceive as the purpose of Occupational Exploration in the district?

____
____
____
____
____

THANK YOU.

OCCUPATIONAL INVESTIGATION INFORMATION SURVEY

Prepared by ______________________ Title ______________ Date __________

School District ______________________ City ______________________

Information gathered from this instrument will be used to develop curriculum for Occupational Investigation and teacher-education inservice programs. Please answer as correctly and specifically as possible.

1. How many unit(s) of Occupational Investigation does/do the district have operating for the 1983-84 school year? __________

2. How many of the Occupational Investigation Teachers have previous experience teaching Occupational Investigation? __________

3. How many of the Occupational Investigation Teachers are teaching Occupational Investigation for the first time this year? __________

4. Do the responses from questions two and three equal the answer for question one? If not, please explain the discrepancy.

   ____

   ____

5. How many minutes in length is an Occupational Investigation class? __________

6. What is the total number of periods a day in the school(s) having Occupational Investigation? __________

7. How many weeks in length is/are the Occupational Investigation course(s) of study? __________

8. Approximately how much money is budgeted for Occupational Investigation instructional supplies per unit? __________

9. What is the average number of students in an Occupational Investigation class? __________

10. Approximately how many students will complete Occupational Investigation for the entire 1983-84 school year? __________

11. Prioritize the list of special student populations based on the percentage taking Occupational Investigation. (Use number 1 for the largest percentage and 5 for the smallest. If a population is not served, enter 0.)

    _____High Academic
    _____Disadvantaged
    _____Special Education
    _____Limited English Proficiency
    _____Handicapped

OVER

12. What is/are the type(s) of Occupational Investigation unit(s)? (Regular or V.E.H.) ______________

13. Can students who have successfully completed Occupational Investigation repeat the class? ______________

IF YES: How are they scheduled? In a separate class, with first year students, etc.

____

____

How many times can they repeat?

____

14. Has the district completed any type of evaluation, follow-up or research on the effectiveness of Occupational Investigation? ______________

15. What is the local name of the Occupational Investigation class used by the district? (i.e. Career Investigation, etc.) ______________

16. Circle the grade or grades of students enrolled in Occupational Investigation.

Sixth
Seventh
Eighth
Ninth
Tenth
Eleventh
Twelfth
Other

17. Is Occupational Investigation a required course? ______________

18. What do you perceive as the purpose of Occupational Investigation in the district?

____

____

____

____

THANK YOU.

APPENDIX C

LOCAL EDUCATION AGENCY EVALUATION SURVEYS

- Commerce I.S.D. Evaluation of the Occupational Investigation Program by Students
- North East I.S.D. Student Survey of the Occupational Orientation Exploration Program
- North East I.S.D. Student Survey of the Occupational Orientation Investigation Program
- White Settlement I.S.D. Student Survey of the Occupational Orientation Investigation by High School Seniors

COMMERCE ISD
EVALUATION OF OCCUPATIONAL INVESTIGATION BY STUDENTS

I. PROGRAM GOALS

	Yes	No
A. Do you know what main goals for OI (Career Ed) are:	( )	( )
B. Do you think these goals are appropriate for girls & boys?	( )	( )

II. ACTIVITIES

	Yes	No
A. Do fieldtrips allow you to visit a wide variety of business in our community?	( )	( )
B. Do you think the speakers we have had have been informative and professional?	( )	( )
C. Have the occupational films you have seen been informative?	( )	( )
D. Are you held accountable for the information obtained from fieldtrips, speakers and films?	( )	( )
E. Does your teacher explain assignments so that you understand them?	( )	( )

III. FACILITIES

	Yes	No
A. Is your classroom large enough to comfortably carry on classroom activities such as group discussion, cutting and pasting from magazines and newspapers, etc.	( )	( )
B. Do you think the books in the Career Education library were helpful?	( )	( )
C. Is there a wide variety of career related material available in the classroom?	( )	( )

IV. OUTCOME

	Yes	No
A. After taking Career Education, are you more aware of jobs that you might be interested in - in the future?	( )	( )
B. Do you understand better your likes and dislikes, and abilities and values, and how they relate to your career choice?	( )	( )
C. Do you think you have a better understanding of the "Working World"?	( )	( )
D. Do you know what kind of training is required for the career that you are considering?	( )	( )
E. Do you understand what the fifteen (15) career clusters are?	( )	( )

NORTH EAST INDEPENDENT SCHOOL DISTRICT

STUDENT SURVEY

OCCUPATIONAL ORIENTATION - EXPLORATION

The purpose of this survey is to determine whether your classroom and shop experiences in the Occupational Exploration program at Lee High School has had some influence in your educational and career planning. Since the responses will be anonymous, you are encouraged to provide information that will be meaningful, useful, and sincere. Please complete each item by either checking the appropriate response or by completing the blanks.

1. In your own words, tell what you think was the major purpose of this course?
____

2. What did you like most about this class? ______________________

3. What did you like least about this class? ______________________

4. Would you recommend this course to a friend? ____ Yes ____ No ____ Not Sure

5. How did you come to choose this course as an elective? (Check as many as apply.)
____ A friend recommended it
____ Parents encouraged me to take it
____ I was interested in woodworking
____ A counselor recommended it
____ A teacher recommended it
____ I heard it was an easy course
____ It was just a fill in, I didn't know what else to take.
____ Other ______________________________

6. Would you have chosen another exploratory program, if it was available?
____ Yes (What cluster? ______________________) ____ No

7. Did this course help you in deciding what other courses you should take in high school or after high school?
____ Yes (How? ______________________________)
____ No ____ Somewhat

8. Did this course help you in your progress towards deciding on a career?
____ Yes (What career? ______________________) ____ No
____ Somewhat ____ I'm not sure

9. In your opinion, were the class materials and shop equipment and tools adequate in introducing you to the various careers in the cluster?
____ Yes ____ No ____ I don't know

10. Was the course work: ____ too easy ____ easy ____ just right ____ difficult
____ too difficult

11. What was the most important thing you learned in this class? ______________
____

12. What would you recommend for improving the course? ____________________
____

13. Are you now enrolled in a vocational program?
____ Yes (What program? ______________________) ____ No

14. Are you planning to enroll in a vocational program?
____ Yes (What program? ______________________) ____ No
____ I'm not sure yet

15. Add any other comment you wish. ______________________
____

Thank you!

NORTH EAST INDEPENDENT SCHOOL DISTRICT

STUDENT SURVEY

OCCUPATIONAL ORIENTATION - INVESTIGATION

The purpose of this survey is to determine whether your classroom work and experiences in the Occupational Investigation program at Nimitz Middle School has had some influence in your educational and career planning. Since your responses will be anonymous, you are encouraged to provide information that will be meaningful, useful, and sincere. Complete each item by either checking the appropriate response or by completing the blanks. It may have been sometime ago that you had this course and it might be difficult to remember clearly, however, please do the best you can.

1. In your own words, tell what you think was the major purpose of this course?
   ____

2. What did you like most about this class? ______________________

3. What did you like least about this class? ______________________

4. Would you recommend this course to a friend? ____ Yes ____ No ____ Not Sure

5. This Occupational Investigation course should:
   ____ Remain a required course for all students in the Middle Schools.
   ____ Be an elective course for only those wanting to take it.
   ____ Not be offered in Middle School, but offered in High School.
   ____ Not be offered at all.
   ____ (Your comment: ________________________________.)

6. Was it easy to see how this course could help you in your High School planning?
   ____ Yes ____ No ____ Somewhat ____ I'm not sure

7. Did this course help you in any way in your High School planning?
   ____ Yes (What? ______________________) ____ No ____ Somewhat
   ____ I'm not sure

8. Did this course help you in your progress towards deciding on a career?
   ____ Yes (What? ______________________) ____ No ____ Somewhat
   ____ I'm not sure

9. In your opinion, were the classroom materials (books, handouts, audiovisuals, etc.) the best available? ____ Yes ____ No ____ I don't know

10. Was the course work: ____ too easy ____ easy ____ just right
    ____ difficult ____ too difficult

11. What was the most important thing you learned in this class? ______________
    ____

12. What would you recommend for improving the course? ______________________
    ____

13. Are you now enrolled in a vocational program?
    ____ Yes (What program? ______________________) ____ No

14. Are you planning to enroll in vocational training
    ____ Yes (What program? ______________________) ____ No
    ____ I'm not sure yet

15. Add any other comment you wish. ______________________
    ____

Thank you!

WHITE SETTLEMENT INDEPENDENT SCHOOL DISTRICT

FOUR YEAR FOLLOW-UP SURVEY
FOR
OCCUPATIONAL ORIENTATION INVESTIGATION
(HIGH SCHOOL SENIORS)

1. What are your plans following graduation?

_____ COLLEGE AND PART TIME EMPLOYMENT
_____ EMPLOYMENT, FULL TIME
_____ EMPLOYMENT, PART TIME
_____ COLLEGE, 4 YEARS
_____ COLLEGE, 2 YEARS
_____ MILITARY
_____ VOCATIONAL/TECHNICAL SCHOOL
_____ APPRENTICESHIP
_____ OTHER ______________________________________

2. At the present time what is your planned occupational choice or planned area of study after high school?

____

In the column, circle the number which best answers each of the following questions.

4---yes
3---some
2---slightly
1---not at all

DID OCCUPATIONAL ORIENTATION INVESTIGATION	yes	some	slightly	not at all
3. Help you develop a positive attitude toward yourself?	4	3	2	1
4. Improve your ability to get along with others?	4	3	2	1
5. Help you in recognizing your abilities and limitations?	4	3	2	1
6. Help you relate your interests, values, and aptitudes to career choice?	4	3	2	1
7. Make you aware of how to look for a job?	4	3	2	1
8. Help you learn necessary skills in applying and interviewing for a job?	4	3	2	1
9. Help you recognize personal traits that contribute to being successful on the job?	4	3	2	1
10. Help you understand the basic principles of our economic system?	4	3	2	1
11. Make you aware of career areas not previously considered?	4	3	2	1

12. Help you recognize job responsibilities of various occupations? 4 3 2 1

13. Help you make a tentative career choice? 4 3 2 1

14. Help you learn to use standard job reference materials (*Occupational Outlook Handbook*, *Dictionary of Occupational Titles*, etc.) 4 3 2 1

15. Help you understand the steps in decision making? 4 3 2 1

16. Help you recognize the importance of goal setting? 4 3 2 1

17. Was a helpful program in preparing you for high school? 4 3 2 1

18. Help you in your high school course selections? 4 3 2 1

19. As a high school senior, do you feel Occupational Orientation Investigation should be required for all eighth graders? 4 3 2 1

20. Please give your suggestions for improvement for the Occupational Orientation Investigation program.

Developed by:

Tim Mayfield - White Settlement Independent School District

Carolyn Smith - Fort Worth Independent School District

APPENDIX D

ADDITIONAL INFORMATION

- Project Quarterly Reports
- Texas Education Agency's Request for Proposal R-10
- House Bill 246, State of Texas

QUARTERLY REPORT

July 1 - September 30

EVALUATE THE EFFECTIVENESS OF THE OCCUPATIONAL ORIENTATION PROGRAMS

Dates	Activities Completed
July 7	Attended a meeting in Austin with RCU personnel, the Director of East Texas State University's Occupational Curriculum Lab and the Occupational Orientation Program Director to negotiate the terms of the Proposal
July 7-18	Developed curriculum and teacher education surveys to solicit input from occupational orientation teachers
July 13	Met with Bill Barnes, Occupational Curriculum Lab Director, to establish membership of the Joint Project Advisory Committee
July 15	Administered surveys to a group of occupational orientation teachers and vocational guidance counselors to field test instruments
July 27	Sent completed proposal modifications to the RCU
July 30-August 2	Attended the Vocational Guidance Conference to administer instruments and to interview teachers
August 8-September 2	Prepared data for computer data entry and completed three computer programs to report and analyze data
August 16-present	Outreach to obtain additional surveys from teachers who did not return instruments at the conference
August 25-September 1	Interview for research assistant position. Ms. Kathy Bresnahan-Lopez began September 1
September 8	Met with Mary Hendrix, Occupational Curriculum Lab Coordinator, and Bill Barnes, Occupational Curriculum Lab Director, to organize Joint Project Advisory Committee meeting
September 12-22	Established membership and organized Project Advisory Committee meeting

EVALUATE THE EFFECTIVENESS OF THE OCCUPATIONAL ORIENTATION PROGRAMS

Quarterly Report

Dates	Activities Completed
September 30	Held Project Advisory Committee meeting with teacher educators, business representatives and project staffs
October 1	Held Project Advisory Committee meeting with occupational investigation and occupational exploration teachers

BEST COPY AVAILABLE

QUARTERLY REPORT

October 1 - December 31

EVALUATE THE EFFECTIVENESS OF THE OCCUPATIONAL ORIENTATION PROGRAMS

Dates	Activities Completed
October 3-7	Prepared minutes of Project Advisory Committee meeting for review by Project Advisory Committee members. (Copy attached)
October 3-14	Compiled and analyzed curriculum data. Wrote summaries for final report.
October 5	Administered the Career Maturity Inventory to the junior high occupational investigation students at Lee Middle School in Grand Prairie, Texas.
October 17-present	Contacted teachers who indicated that research has been completed on the Occupational Orientation Program in their district.
October 19	Met with Dr. Bill Barnes, Occupational Currculum Lab Director and Mr. Frank Haskell, Vice-President and General Manager of Moore Business Systems to tour Moore Business Systems and view state of the art computer software systems.
November 1	Met with Dr. James Poirot, Chairman of the Computer Science Department at North Texas State University, at the recommendation of Mr. Haskell to discuss computer software available for Occupational Orientation Programs.
November 3-11	Designed three separate survey instruments for occupational orientation teachers and vocational administrators in Texas to evaluate Occupational Investigation and Occupational Exploration Programs.
November 4	Met with Dr. Bill Barnes, Occupational Curriculum Lab Director, and staff to present curriculum survey results and make recommendations for content and format.
November 9-10	Met with Dr. Paul Myers to coordinate the occupational orientation Demographic survey and to obtain the V.E.E.S. data for occupational orientation programs.
November 14	Submitted draft of survey instruments and cover letter to Dr. Paul Myers for Texas Education Agency approval.

EVALUATE THE EFFECTIVENESS OF THE OCCUPATIONAL ORIENTATION PROGRAMS

Quarterly Report

Dates	Activities Completed
November 21	Completed survey to occupational orientation teachers on program evaluation.
November 21-present	Began search for research on programs of occupational orientation to prepare review of literature section for the final report.
December 5-9	Prepared Vocational Administrator Evaluation survey packets to be mailed to all school districts having an occupational orientation program. (To be mailed upon receipt of the cover letter from the Texas Education Agency.)

BEST COPY AVAILABLE

QUARTERLY REPORT

January 1 - March 31

EVALUATE THE EFFECTIVENESS OF THE OCCUPATIONAL ORIENTATION PROGRAMS

Dates	Activities Completed
January 2-6	Prepared 1980 and 1983 data for computer entry and designed computer program to analyze data.
January 9-31	Completed first draft of the Teacher Education section for the Final Report.
January 17	Met with Bill Barnes, Occupational Curriculum Lab Director at East Texas State University to work on the review of literature and to review curriculum format.
January 20	Mailed three surveys to every Local Education Agency offering Occupational Orientation.
January 21	Met with teachers on the Project Advisory Committee to discuss the administration of Career Maturity Inventory tests.
January 27-February 29	Compiled and recorded Vocational Administrator survey data.
February 6	Sent out follow-up postcards to districts that had not yet returned their Vocational Administrator surveys.
February 9	Revised mailing list for Vocational Administrator survey and mailed surveys to districts not included in first mailing.
February 15-21	Prepared Teacher Education data for presentation to teacher educators at the State Conference in Austin.
February 15-March 30	Received Career Maturity Inventory pretests. Graded tests, recorded scores, prepared data for computer entry.
March 7	Completed mailing to obtain Local Education Agency evaluations on their Occupational Orientation Programs.
March 8-23	Contacted school districts by phone that had not returned the Vocational Administrator surveys.
March 15-30	Completed first draft of the Curriculum section for the Final Report.

REQUEST FOR PROPOSAL--R10

Program Identifier: Research -- Evaluate the Effectiveness of the Occupational Orientation Program

Rationale: There is a need to assess and update occupational orientation curriculum and material with regard to validity as an accurate reflection of rapidly changing technology and to refocus occupational orientation teacher education to reflect technological change as it occurs.

Purpose: To evaluate the occupational orientation curriculum and occupational orientation teacher education and recommend changes for update, as needed.

Objectives:

1. To review revision and tentative projection of occupational orientation curriculum to reflect status change and project curriculum for possible future needs.
2. To determine preservice and inservice training needs of occupational orientation personnel and other staff to update and improve the quality of occupational orientation programs to better serve special populations.
3. To determine appropriate activities, instruction, and materials for professional development which accommodate ongoing technological development.

Specifications: An advisory committee of occupational orientation teachers, occupational orientation teacher trainers, appropriate TEA occupational education personnel, and other educators as needed, will be formed to assist the project director. The project director will have acceptable experience with occupational orientation programs and experience in development of occupational orientation curriculum materials. The project will provide for workshops for occupational orientation teachers as requested by the TEA. All materials of the project shall include items addressing the following:

a. suggestions for modifying materials for use with handicapped students
b. suggestions for promoting equal access in all trade areas
c. suggestions for computer applications in applicable trade area areas
d. suggestions for adapting materials for use with students of limited English proficiency (LEP)

Products/Deliverables:

1. Occupational orientation curriculum materials and updates (10 copies)
2. All materials of the project (10 copies)
3. Quarterly reports (5 copies of each)
4. Final report (100 copies)

Time Frame: July 1, 1983 through June 30, 1984

Cost: Not to exceed $35,000

PROPOSED ESSENTIAL ELEMENTS FOR OCCUPATIONAL EXPLORATION

(February, 1984)

(1) Concepts and skills involved in the in-depth exploration of jobs in an occupational cluster. The student shall be provided opportunities to:

(A) identify and analyze one of the occupational clusters;

(B) conduct an in-depth study of occupations in the cluster of personal interest to the student;

(C) participate in laboratory-based instruction; and

(D) participate in visits to work sites.

(2) Concepts and skills relating to the discovery of abilities, interests, and aptitudes. The student shall be provided opportunities to participate in assessment inventories, hands-on activities, and shadowing experiences to assist in the verification of personal interests, aptitudes and abilities.

(3) Concepts and skills needed for the establishment of occupational goals. The student shall be provided opportunities to:

(A) investigate the socio-economic characteristics of a specific occupation to establish relevancy to personal goals; and

(B) review personal aptitudes, interests, emotional and physical needs to determine occupational goals.

(4) Concepts and skills leading to the formulation of specific educational plans. The student shall be provided opportunities to participate in visits to high schools and post-secondary institutions to acquire an awareness of available educational and training resources.

PROPOSED ESSENTIAL ELEMENTS FOR OCCUPATIONAL INVESTIGATION

(February, 1984)

(1) Concepts and skills necessary for self-appraisal. The student shall be provided opportunities to use standardized or informal test data to appraise such factors as personal interests, aptitudes, achievement level, academic potential, life-styles, and social/emotional needs.

(2) Concepts and skills related to the occupational clusters. The student shall be provided opportunities to:

- (A) identify and analyze the occupational clusters to achieve a broad understanding of the world of work, including new and emerging occupations;
- (B) concentrate individual study on clusters related to personal interests and aptitudes to develop skills in utilization of sources of occupational information;
- (C) train in decision-making skills to establish a method for continuing occupational decision-making throughout life;
- (D) utilize job information to learn about duties, educational requirements, training, salary, and other pertinent job-related factors;
- (E) develop employability skills;
- (F) develop realistic perceptions of the world of work; and
- (G) participate in visits to work sites.

(3) Concepts and skills associated with socio-economic factors related to occupations. The student shall be provided opportunities to gain an understanding of the economic system to determine attitudes toward work, human interrelationships on the job, and changes in work and life-style resulting from changing economic and technological conditions.

(4) Concepts and skills needed for educational planning. The student shall be provided opportunities to:

- (A) acquire an awareness of available educational training and resources through visits to high school programs, both academic and vocational, area vocational schools and programs, or by bringing representatives of these schools and programs into the classroom; and
- (B) develop a tentative education plan for high school.

BIBLIOGRAPHY

Barnes, William James, "The Effect of Occupational Investigation Programs on Ninth Grade Students as Measured by the Career Maturity Inventory," unpublished doctoral dissertation, East Texas State University, 1974.

Bearden, Vance Keith, "The Effects of an Occupational Exploration Course on Facilitating the Career Maturity of Ninth Grade Male Students," unpublished doctoral dissertation, East Texas State University, 1975.

Coopersmith, Stanley, *The Antecedents of Self-Esteem*, San Francisco, W. H. Freeman and Company, 1967.

Crites, John O., *Career Maturity Inventory Administration and Use Manual*, California, McGraw-Hill, Inc., 1973.

Gabryl, Roy, "A Study in Career Choosing and Work Attitudes of Seventh Grade Students," unpublished report, Northeast Independent School District, San Antonio, Texas, 1980.

Gabryl, Roy, "Occupational Orientation (Exploration) Program Evaluation Report," unpublished report, Northeast Independent School District, San Antonio, Texas, 1982.

Gabryl, Roy, "Occupational Orientation (Investigation) Program Evaluation Report," unpublished report, Northeast Independent School District, San Antonio, Texas, 1982.

Hollenback, Kathryn, "Assessment of Occupational Exploration Programs and Resource Materials," unpublished materials, Texas Education Agency, Austin, Texas, 1981.

Hollenback, Kathryn, "An Assessment of Occupational Orientation Investigation Activities and Course Content at the Local Level to Determine its Effectiveness," unpublished materials, Texas Education Agency, Austin, Texas, 1980.

Huffstutler, E. Vaughan, et al., *Search for Effectiveness of the Occupational Orientation Programs in the State of Texas*, Final Report, E.P.D. Consortium D, Richardson, Texas, June, 1973.

Jernigan, Arthur, Vocational Director, Greenville Independent School District, Greenville, Texas, Interview, 9 March, 1984.

Lackey, Sheryl Lynn, "Effects of Occupational Investigation on Selected Eighth Grade Students' Self-Esteem and Locus of Control," unpublished doctoral dissertation, East Texas State University, 1981.

Laws, Nancy, "Evaluation of Occupational Investigation by Students," unpublished report, Commerce Independent School District, Commerce, Texas, 1983.

Magill, Charles L., "The Effects of an Occupational Investigation Program Upon the Career Maturity of Students at a Career Academy Within the Magnet School Concept," unpublished doctoral dissertation, East Texas State University, 1979.

Mayfield, Tim and Carolyn Smith, "A Four-Year Follow-Up Survey for Occupational Orientation Investigation," unpublished report, White Settlement Independent School District, Fort Worth, Texas, 1983.

Mokaramane, Penpun, "The Effects of an Occupational Investigation Course on the Career Attitudes of Eighth Grade Students," unpublished paper, North Texas State University, Denton, Texas, 1984.

Nie, Norman H. et al., *SPSS: Statistical Package for the Social Sciences*, 2nd ed., New York, McGraw-Hill Book Company, 1975.

Qualls, David, "Teachers' Perceptions of the Occupational Orientation Teacher Training/Certification Program in Texas," unpublished doctoral dissertation, North Texas State University, Denton, Texas, 1980.

Rivas, Maria Olivia, "Effects of a Career Development Program on Selected Variables of Disadvantaged Mexican-American Students," unpublished doctoral dissertation, East Texas State University, 1978.

Rotter, Julian B., "Generalized Expectancies for Internal Versus External Control of Reinforcement," *Psychological Monographs: General and Applied*, 80 (1966), 1-28.

Texas Career Education Measurement Series: A Student Needs Assessment, Texas Education Agency, Austin, Texas, 1976.

Texas Education Agency, "Occupational Exploration Questionnaire," a computer print-out, Austin, Texas, December 6, 1983.

Texas Education Agency, "Occupational Investigation Questionnaire," a computer print-out, Austin, Texas, December 6, 1983.

Witherspoon, Travis J., "A Study of Occupational Investigation Programs in Texas Via Student Perception," unpublished doctoral dissertation, East Texas State University, 1978.